THE SOJA BEAN.

The New Legume Which Promises to

Be of Great Value.

pright varieties of the cow pea. The

growth is erect, from three to four and

one-half feet high. The stock is strong

and woody. The pods occur in clusters

Two distinct species have been called

Soja beans. The small bean (Phaseolus

radiatus) is largely used in Japanese

confections, but is of no special value as

The large bean (Soja hispida or Gly-

cene hispida) is the true Soja or Soya

bean. In Japan this bean is extensively

At the South Carolina Station the

used as food for men and animals.

of from two to five.

a fodder plant.

ONSIDERABLE

interest has de

velopt regarding

the Soja or Soya bean, and THE AMERICAN FAR-

MER has received

a number of inqui-

ries in regard to

it. It is an an-

nual leguminous

plant resembling

the bunch or up-





FEEL a certain garden from which all the necessaries in cold type upon the topic of what one year up to the beginning of another. a farmer gains or loses as he plants

good vegetable gar-It is a subject that has been for all of that time, and of all things that must naturally be best understood this matter of how and what to do in the way of a vegetable garden ought to be most familiar to the farmer.

In all truth, I believe that the absence, as a rule, of well-planted kitchen gardens on our farm lands is not all due to the negligence or the ignorance of the American farmer. It is due to the fact that he feels unable to spare the time necessary for cultivation on the part of himself and his hired help, and only plants a little patch of "truck" for the vomen to look after with their chickens close by the house.

Therefore, as a general rule, you will find the farmer's kitchen garden only a step to and from his door sill. You will find the vegetables sown in close rows on rich soil, heavily manured and rank with weedy growths. If diligent and timely r and care is given to this patch th results are often excellent, but unless that great diligence and wise attention is so given the comparative failure of the garden is assured, and the proverbial spread of meat, potatoes, and bread, bread, potatoes, and meat, with unfailing regularity appears upon the farmer's table at that very season of the year when an abundant supply should be present of fresh peas, sweet corn, cucumbers, melons, tomatoes, and beans, snap and Lima, beets, onions, cabbage, etc., when these things taste best and are most craved by the tired, thirsty, and hungry harvesters and stock raisers.

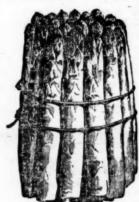
The root of all this failure of the farmer's kitchen garden is, in my opinion, due to the great and initial error made at the outset of, first, in not planting so as to let a horse and cultivator do most of the work of tilling the soil and killing the weeds, and, second, in not removing the garden site to a distance from the house or barn where the chickens do most congregate. Indeed, I think the isolation of the kitchen garden as important to its success on the average farm as its care and cultivation. Every farmer has a flock of poultry, many have ducks, and a few geese and turkeys. These fowls invariably range between the barn and the house, and if the little vegetable garden is within gunshot the chances are that this range will be extended to it. The damage done by scratching and indiscriminate feeding of a lot of such fowls is great and discouraging. It won't do to shut up the hens, for they will stop laying and get sick. They are of more immediate worth than



It is not my intent to tell the farmer how to plant his garden seeds; how to growing is the subject of my writing. anybody how to sow his sweet corn, peas, ing type into service for that purpose, but I have found during my ranging in and around the farmer's homes in this all weeds on the patch. kitchen garden. I propose to outline usually brings your knife into collision

the management of a farmer's vegetable reluctance to touch and most of the table luxuries for 12 or 13 souls can be drawn from the end of

Select a piece of ground on your place that is at least 1,000 feet away from your house and barn; this spot thus selected or does not plant a for your kitchen garden should be not less than 200 feet square, nor need it be dressed up in a multitude of shapes and larger than 250 feet square. If it is a urged in all sorts of taste. It lies close sandy loam or clay, see well to the drainto the farmer's life year in and year out, age; it may require underdraining, and and comes up to him three times a day, if so, do not hesitate to do it; it may lie so that the use of tile is superfluous, and such is generally the case where gravelly sites are accessible



To this ground in the Spring, March, after, composting it during each Summer in your barnyard).

Do not scatter the manure until the right for plowing, and not until it is, plow as soon as you can after the frost leaves the soil in March; plow deeply with narrow furrows. If the ground is a gravelly loam and mellow after plowing, do not harrow it; never use the harrow if you can help it-rather so time your plowing as to leave the ground light and mellow when the furrows fall into place. With clay loams, great care should be taken in plowing at the right hour, so as to leave the garden ground loose and fine. It must not be too wet or too dry when the plow enters the soil, but just right, or the garden will "bake," and make the labor of caring for it infinitely greater than it should be, for the cultivator and the hoe can and will do three and four times as much and as well per diem on a piece of well plowed ground as on one that has not been so treated.

At one corner of this garden ground lay off a patch of asparagus. Plant a bed there of 150 to 300 plants, so as to cover 50 x 8 feet; this bed will be the greatest single source of edible comfort to the owner that he can establish on his place. It will be in good form for cutting the third year after setting, and steadily improve up to the 12th year; then, lest unimpaired as to yield and quality for the next 50 years, requiring but little care, a few hour's attention every Spring in the way of clearing off the dead seed stalks season's growth, and the application of a manure, lightly cultivated in over the manure, lightly cultivated in over the This garden plot of 200 feet square load or two of rich, well-rotted stable den ground immediately after that thawfrost has left the ground. This early, rich manuring, steadily every season, seems to keep the ground warm and starts the quickest growth of this fine, table vegetable, so that from the first week in April until the end of May any amount of asparagus required can be daily cut. When first beginning to cut, it is well to cut everything that springs up. Cut off the bed clean every two or three days, no manage them after they are up and matter whether the surplus is used or not; then in May let it grow, as you do He knows everywhere just as well as not want it, cutting only here and there as you may elect for each demand from turnips, etc. There is little need of tak- the kitchen. This insures a full rank growth of seed stalks, which properly ripen the roots and effectually sm

region ever since 1872 a great lacking of I think it best for the bed that deep good direction and care of the family cutting be seldom followed, because

underground with sprouting buds and destroys in this way as much again as you cut at the time. The best of the asparagus is always that which you find above ground, never letting it grow to a greater hight before cutting for the table than six inches; indeed, I cut all of mine when four inches up, getting it most tender and sweet at that stage.

My asparagus bed is on a light, gravelly loam, but it does equally well on clay loam, only requiring that water does not stand on the spot. It is also a great salt eater, and all your pork brine, mackerel kit leavings, etc., should be thrown upon the bed. You need not fear the result of almost any amount of such a sprinkling. It seems to keep the asparagus, and certainly kills the grass and weeds which on such rich places get a prodigious start in the early Spring while you cut back the growing aspara gus shoots. After you finish cutting by the middle or end of May, for very few care to eat asparagus longer, then the undisturbed growth after that will so spring up and cover the bed as to effectually choke out and smother all weeds and grass, and the dead seed stalks during Winter will hold snow and keep a warm mantle over all until the opening of the new season.

Then cut off the seed stalks just as the frost leaves, run a light shallow cultivator over the bed so as to mellow up the surface of the ground an inch or two deep, and uproot any grass or weeds that may be there, and at the same time mixing your compost dressing thoroughly with the top soil before the first growth appears, and that growth appears with great certainty after the first two or three warm days and rain early in April. Nothing more wholesome and palatable can be brought out from the kitchen garden than tender asparagus, and yet how few of our farmers have this easily managed vegetable in their gardens; most of them probably deterred by the idea that it requires some extra care and trouble to raise, like celery and the like, when in fact it calls for less attention than a few hills of potatoes do. The plants, 150 of them, can be bought for 75 cents, or 300 of them for \$1.50, and the bed planted in a few hours, which is to last for the natural lifetime of the farmer, and his children, too, for that

loads of well rotted stable manure, free our kitchen garden. The next in order from straw or cornstalks (and haul this is an abundant supply of lettuce, which can amount of manure out every Spring here- be forced in the southern windows of the kitchen, sown in a small shallow wooden box, and transplanted to rows in the garden just as soon as the ground there is ready. day you plow. Then if the ground is just Spring frosts do not hurt it, but the ground must be kept clean and mellow and rich in which it is planted. This



IMPROVED RED VALENTINE.

this early period of planting your lettuce you can safely sow your beets and your parsnips and plant your onion sets, and on a gravelly spot it is well to plant your peas. All of these will lie in the ground without rotting, even if it be cold and wet after the frost leaves the earth until it is so warmed by the advance of the season as to cause their germination. I find in this section, or the Lake Erie region, that the frost is pretty regular year in and year out in thawing out by which you have left over from last the 25th of March to 1st of April, and I lose no time in plowing the kitchen gar-

thus plowed gives the farmer 60 rows for planting, three and a half feet apart, all of them, with the slight exception of that little jog in the corner where the asparagus bed goes. The right proportion of planting this patch so as to get a full supply for the family from the be- plant your nutmeg melons and your ginning to the end of the season is about as follows, gravelly loam:

Twenty rows of early potatoes-plant April 1 to 5.

Two rows of Stratagem or Champion peas-plant April 1 to 5.

One-half row of salsify or vegetable oyster—plant April 5 to 10.
One-half row of early been April 5 to 10.

One row of carrots-plant April 10

One-half row of lettuce-transplant to row from box April 10, or sow in row

One-half row of long, green cucumber -plant May 5 to 10. One-half row of nutmeg or cantaloupe melons—plant May 5 to 10.

One-half row of Yellow Wax beansplant May 5 to 10. One-half row of Yellow Wax beans

plant June 1 to 5. One-half row of Yellow Wax beansplant June 20 to 25. One-half row of short, green, pickle cucumbers—plant June 20 to 25.

One row of Lima beans—plant May 5

to 10. One row of cabbage, Flat Dutch and Early York—plant June 15.

One row of Dwarf Champion or Acme tomatoes-plant May 15 to 20.

Four rows of earliest sweet cornplant May 10 to 12. Four rows of Stowell's Evergreen sweet corn—plant May 10 to 12. Four rows of Stowell's Evergreen

sweet corn—plant May 20.
Four rows of Stowell's Evergreen sweet corn-plant May 30. Four rows of Stowell's Evergreen sweet corn-plant June 10. Four rows of Stowell's sweet corn-plant June 20.

Thus planted, there is left over a space equal to nine or 10 rows which can be divided between the corn and the potatoes as the particular taste of the family may elect. Some families are exceedingly fond of sweet corn, and others not so partial to it. The above planting of potatoes will give from the first digging of them, on the 8th to 10th of July until they all go, from 35 to 40 bushels in dry seasons, and 50 to 60 bushels in wet Summers on gravelly loam. The sweet corn will be ready on the 20th of July, and remains equal to all demand until frost in October; the deferred plantings bringing it in fresh for the table all the

Such a garden will, during normal seasons, when it is not unusually dry or abnormally wet, be a source of infinite satisfaction to the farmer and his family from the opening to the close of the growing year, and if he has never indulged in such a planting before, he will wonder as he reaps from it why he has successful planting I shall itemize as

Plant potatoes in hills 18 inches apart in the rows; plant with a hoe, and never cover more than four inches deep. If the season opens wet, use the shovel plow after the first cultivation and hoeing; if dry, never shovel plow, but use the "twofooted" cultivator instead. It will throw earth enough to cover the potatoes, and yet not dry them out so badly as the shovel plow will,

Sow your peas in a shallow furrow or drill row, sow them thinly, and do not cover deeper than one inch. After the first hoeing and when they are about six inches high then brush them; brush them by all means if you possibly can; they will do twice as well as when left to roll over on the ground.

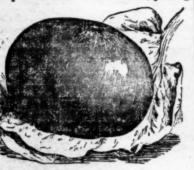
Sow parsnips, early beets, carrots, and vegetable oyster in shallow drill rows (make them with your hoe handle) and just cover lightly. If the ground is very light and sandy after sowing and cover-ing, place a strip of board down on the rows and tramp them lightly; on heavy loam never tramp.

Lettuce is most successful as an early relish by starting it in a box at the kitchen window during March. Then early in April transplant it to the garden row. This action will give good heads for the table from two to three weeks earlier than if delayed for the April sowing. Cucumbers should be planted in flat, open hills, with an additional enrich-

ment of the earth under these hills. Plant them about four inches apart in the hill, and sow 12 or 13 seeds; then thin out to four and six plants during the first hoeing. Unless you plant an extra number in each hill, the cut worms are liable to take most of the young plants at times when you least expect it. I also, to insure the plants when they first come up against certain flies, cover them with small wooden frames 18 inches square, over which I stretch a bit of mosquito netting. This hastens their growth by warming the hills, and is every way beneficial. In this manner

Wax and string beans should be planted in hills 18 Inches apart in the rows, six or seven beans to the hill, scattered an inch or so apart in the hills. I like the Yollow Wax best; it does not One row of parsnips—plant April 1 grow tough like the green strings or 5. several days or a week even after the

non of all good beans, and will give for a Fall and cellar wilted. Turnips are little care the handsomest return of all better kept right out on the ground planting in the garden; but this care they must have. Enrich the ground much more than for any other vegetable, inches of earth thrown over them, if you except tomatoes. Sow in a line, putting



TURNER'S HYBRID, OR MCKADO.

the beans down into the earth about one inch with the thumb and fingers, about eight inches apart on this line. Then sink a good eight foot post into the ends of the row, and at intervals of 50 feet between these ends additional posts; sink them at least two and a half feet in the ground. Then stretch three No. 9 iron wires from end to end on these posts. The top wire over the tops of the posts, the next wire 18 inches under, and the third one 18 inches below that. Then at intervals of every 18 inches along these wires fasten grape strings or similar cheap, stout twine, so that they hang firmly down to the ground from these

The beans will self catch and climb up on them, and save the extremely difficult business of getting long, suitable poles for the plants. Unless so trellised or poled they will amount to nothing. But if so cared for they will commence to yield handsomely by the middle of July until frost in October cuts them down. Let a few pods ripen up fully for seed every year, and save it, for of all seed to buy that is good, this is the most difficult to secure. These seed pods should hang for weeks on the vines after they first turn yellow before they are picked for seed. Then when so picked, do not shell them out until you are ready to plant again next Spring. Most of the failure in growing Lima beans is due, in

my opinion, to poor seed.

Cabbage plants enough can be easily raised for the farmer's garden in a shalbe set out in the garden before the middle of June, unless very early heads are desired. These can be put out at the same time you transplant the lettuce; they will not keep, however, and must be used before Summer is over.

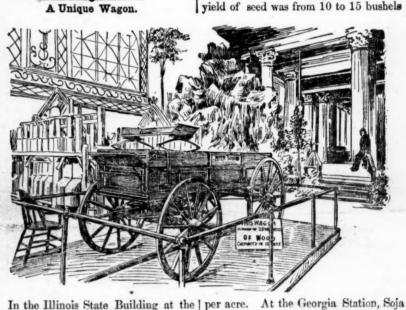
Tomato plants are also easily raised in the window for the farmer's garden, if you are outside of the reasonable purchase of such plants, as most farmers are. They require the richest of rich ground for their full perfection, and a sharp eye all through the earlier stages of their growth for that large and voracious tomato caterpillar, which particulary affects these vines. Plant stout seedlings in the rows about two feet apart; if the ground is very rich, two and a half feet. There are now so many good kinds of smooth tomatoes that it is hard to say which one is the best. I like the Dwarf Champion a little better than any other one.

Good sweet corn is another prime article for daily use on the table. Get it early, and plant so as to keep it going until frost in Autumn. I have used a great many varieties. All of the early kinds are good in their way; i. e., small middle of July.

where they have been pulled in the Fall. with a slight covering of four or five want any for use in March or April; but your beets and your carrots you must take into your cellar, just as you handle your potatoes.

Such a garden as this one which I have ust outlined I know all about, for I have planted and reaped it regularly during these last 27 years. It is as necessary to the comfort and pleasure of my living as is the clothes upon my back are; in fact, I would not live in the country without its backing. Many of its products you cannot buy in the best markets fresh and toothsome, and if you could buy them they would be at a costly figure. A few hours' work of a horse and cultivator between the end of May and the 1st of September is all that is needed to keep the space between the rows as clean of weeds as a swept floor, while the hoeing and weeding in the rows may keep a man busy for perhaps a half-day in the week during that period. The weeds must be kept down and the ground stirred mellow, or the best results will never follow.

A Unique Wagon.



World's Fair and near the beautiful beans yielded 1,307 pounds of beans per waterfall is exhibited a wagon which does acre, while the yield of cow peas on an not have a rival in the world. In appearance it is simply an ordinary wagon | The weight of dry forage from the forof the kind in practical use on farms all | mer was also greater than that of the hay over the country. In this its uniqueness does not lie, but in the fact that in its construction is entered material from 25 different trees which are grown in Illi-The wagon is complete and is ex-

hibited in a conspicuous place. It stands on a raised platform, and to prevent acts of vandalism it is surrounded by a highly polished brass rail. Lying against one of the rear wheels is a sign which acquaints the visitor of the fact that it is constructed of so many different kinds of

THE WOOLEN EXHIBIT BUILDING.

One of the Most Striking Edifices on the World's Fair Grounds. The American Woolen Exhibit Build-

ing is situated on Columbia Avenue near the great elevator and the Manufacturers and Liberal Arts Building. It is pronounced by good judges as one of the finest and most imposing fronts in the building, second only to those beears and good flavor, but the best and fore the sections occupied by France, most appetizing is Stowell's Evergreen. Germany and Austria. The construc-It comes late, however, not being ready tion is that of an arcade with a pavilmuch before the 1st to 10th of August, ion and tower at each end, and a pavilwhile the early sorts can be eaten by the ion at the main entrance to the woolen area. The most over \$9,000.

adjacent plot was only 840

from cow peas.

The Soja bean is planted in drills, five o seven beans to the foot. It is cultivated like cow peas, and is utilized as a

soiling crop, as hay, and as silage. The report of the Massachusetts Station says: "White Soja beans, four rows. The seed was raised upon the station grounds in 1890. It was sown in rows three feet and three inches apart May 18; the young plants appeared above ground May 30, and began to bloom during the middle of July. The lower leaves began to dry up Sept. 4. The crop

was pulled to collect the seed Sept. 25. "Black Soja beans, four rows. This variety is of a lighter green color, and seems to be somewhat more vigorous than the former. It is still green when the white variety has turned yellow. We have raised for several years, successfully, large crops of both varieties of the Soja bean, and consider them for our locality a most valuable addition to our forage

crops. The Louisiana Experiment Station says that it planted both varieties May 23. and they came above ground June 2. The white began to bloom Aug. 9, and the black the next day. The white matured sooner than the other. The plant grows from one to two feet high, and bears an abundant crop of short pods, filled with small round peas resembling the sweet pea. It has a large leaf, which



When your peas are done for, as they will be by the middle of July at the

A Horse of Oats.

Missouri's display at the World's Fair latest, pull the brush, cultivate the ground, and by the 25th of July sow your turnips where they grew, "wet or esque. Her agricultural resources seem usual time of plucking. These Wax beans soon become as regularly welcome and necessary to every nical as potatoes over in the ground—never dig them seque, when the sweet pear. It has a large lear, which without limit. Grains of all kinds, various grasses and a case of Missouri birds are shown. One of the decorations is a do in many families.

Lima beans are simply the sine qua and better then than when dug in the mane and tail of pampas grass plumes.

Vield was from 25 to 35 bushels per acre.



Never allow a diseased hog to come mon the farm.

Winter wheat may be sown after rape, with every assurance of a good crop. Blue-grass, if sown alone, requires 28

pounds of seed to the acre. Repair the farm fences while there is

not much other work to do on the farm. Clean out the pig pens before the pigs

become sick. Give them plenty of range. For success in swine raising two things are necessary, a good breed and good

Young stock should be fed on material that will produce bone and muscle, pot fat.

Successful steer raisers know that the animal must be kept growing from its birth until marketed.

In stock feeding as much depends upon the manner in which the food is supplied as upon the character of the

a gain of 10 to 15 pounds in their

To have a thrifty herd of cattle or a flock of sheep, one must begin at the beginning, before birth, and keep it up until ready for market.

In the weaning of young animals, be careful that they do not get set back. A stunted pig, lamb, calf, or colt can never fully recover and meet your expecta-

The great secret of success in stock raising is controlling the conditions of food and comfort, and thus insuring a quick and vigorous growth and a healthy development, no matter what the season may be.

Scientific investigations have shown the value of different feeding stuffs, and formulated combinations that have changed results in every branch of live stock husbandry. The intelligent-thinking stock grower may reduce his operations to a mathematical certainty.

It is too often the practice of farmers in the early Spring to let all stock degrasses begin to start. Such feed is hardly fit to eat, to say nothing of keeping up the system. Stock need strong, nutritious feeds in the Springtime if ever.

Forehanded people are always forethoughted; when they need anything they look around in advance and order it from some enterprising breeder, who has faith enough in his business to adverto have at once and so makes a profit on his stuff.

A starved, stunted, lousy calf can never come to thrifty cowhood or make a stately butcher's bullock. The chances of profit have all been missed and the farmer has nothing to hope for from such a depreciated specimen of the bovine genus. It would be wisdom to sell it for what it will bring to someone who seeks to profit by the mistakes of his fellows; who can make a profit on a poor ill-bred or ill-fed animal, not so much by reason of superior skill in feeding, but because he buys it cheap enough for nothing.

THE FARMER'S HORSE.

The Best Breed and the Management and Care Which Should be Given.

The cross made by breeding a full-blooded French draft stallion to a good roadster mare or a thoroughbred mare will make the best horse for the farmer. A colt's education should begin when the animal is 24 hours old. When a horse comes in after a hard day's work, wash his shoulders well with cold water and soap, and give a good feed of oats and hay. After eating, turn him out in the pasture. What feed is the best to keep up the muscular system for this hard work? and good clover or timothy hay, if you give plenty of grain. I think that the co-operative neme of buying a stallion is very good .-- S.

The French coach or large trotting-bred herses are the best for the all-around work of the farmer. 2. The best manner of raising and breaking a colt is to feed all the good, clean grain the animal will eat until one year old: then begin to educate and handle Always treat kindly, and never frighten. 3. When horses come in after a hard day's work in warm weather, let them cool off and feed some hay; then water and give grain. Always water before you feed a horse grain. 4. Good, clean oats ground, or whole, is the best feed to keep up the muscular system; in fact, there is no better feed to produce muscle. 5. I think the co-operative a good scheme for farmers to improve their stock by purchasing a good, first-class stock horse, and perhaps it ld pay well to buy a small bunch of purebred mares to start in. -E. COOPER, Adrian,

The Norman-French draft horse is the best horse the farmer can raise. The best manner of raising and breaking a colt is to teach him to stand tied. Never allow it to follow the dam on the road nor in the field while working her. As soon as it is old enough to eat grain, feed it oats and wheat bran mixed three times a day, one-third wheat bran. In breaking a colt, first teach it to lead. After you have it broken to lead, take it back into its stall; then carefully put the harness on. Do not allow any loose straps hang down to touch and scare it. Lead it out and hitch it of the wagon. Get out in the road; drive off a mile or two and back. Never jerk nor whip a colt. After working a horse all day in warm weather, sponge his shoulders well with cold water. Place him in a well-vectilated stall as soon as he cools off. ' Curry and rub him well with a flannel cloth and bed

well with straw or sawdust. I would not feed one kind of food exclusive. Give corn in the morning, rye and oat chop at noon, and oats at night. I think the co-operative scheme for farmers in a locality to purchase a good stallion and mare to breed from a good one.—S. F. BAKER, Dixon, O.

For exclusive farm work, I think there i no horse surpassing the German coacher, but for farm work and sale when the horse is five years old, I think farmers ought to raise heavy draft horses. They always sell at very large prices, and the demand is always very great for the best. Colts should be handled with kindness and be halter broken when four months old, and broke single (first) when two years old. Patience will do more than a dozen whips. Horses after doing a hard day's work should be groomed and rubbed, and after they are cooled off should be fed outs with one one-third bran (mixed with it), which is the best feed to keep a horse healthy and able to work. If farmers purchase a stallion together, it is a good scheme, provided they buy an extra good one. They are more able to do this than is one person, and they will receive their money with large percentage.—George Klein, Fort Atkin-son, Wis.

A bushel of wheat fed to hogs brought in from a clover pasture will often make a gain of 10 to 15 pounds in their France, regardless of his local name where bred. On this question I am prepared to speak by the card. Fairbury, 12 miles from here, is surrounded by a horse breeding dis-trict. An agricultural fair held there has paid liberal premiums for the best horses of the different breeds and different uses. One lot is designated, "Horses for agricultural purposes," and a premium given for the "Best five colts sired by one horse." The horse may be a Shire or a Shetland, and "Competition is open to the world." For 10 consecutive years, from 1882 to 1891, in clusive, every premium awarded for five colts in that lot has been given to some French horse. These same colts are allowed to compete in their respective places as to age and sex, and fully 80 per cent. of the premiums in that lot have been awarded to the off-

spring of French horses.

Having owned the horses awarded six of the 10 premiums, and having seen the others so awarded, I feel that I am in a position to know the type that has given the best results here. Of the seven stallions receiving premiums for "five or more colts," the type prevailed, although to a different degree. The clean, flat, upright leg, the wide loin, the deep quarters, the round barrel, the high crest with the sanguine temperament, indicated by a clean, cut head, a wide chest, a

soft, mellow skin, and a full silky mane and tail. They were all dapple gray, and their average weight in full flesh was 1,740 pounds. Some of their colts were well nigh perfection. pend on the pastures as soon as the A mare that matured at 1,500 pounds, sired by one of them and her dam sired by another, was awarded first premium six specessive years before she was seven years old, and three sweepstake premiums during the same

Your second query as to raising a colt. The reply is that the feed should be liberal and diversified, but need not be excessive. The grasses in their season, with the addition of small quantities of wheat, bran, oats, peas, and corn, either mixed or in succession, will tise. It is unbusiness-like to put off buying until the last moment and then buy take the form of hay, straw, and corn fodder. of some local dealer who knows you have Well cured clover hay is preferable to any other, from the fact that it is rich in nitrog as are also the oats, bran, and peas, and are important in furnishing material for hoofs, hair, and sinews. The "flat, bony leg," so much praised, is less the result of excessive bone than well developed tendons. Hence the necessity of a well balanced ration that the flesh formers, the bone formers, and the heat producers may harmonize and foster a complete development of the whole physical structure.

A strong halter and a reasonable temper are your stock-in-trade for breaking a colt. first harnessed, hitch him to a load that is neither heavy, noisy, nor bulky. Ascertain what things frighten him and avoid them, instead of deciding what things should not frighten him and trying to convince him of his error. Work him in line with his whims. and he will soon learn to respect yours.

How to treat a horse after a hard day's work? should generally be answered by, quit when you have done enough. If a horse must do very hard work, the treatment should begin with the work, and little can be done except to feed little or nothing till the work is done. A dozen horses belonging to Kansas Militia carried their riders 100 miles between 3 a. m. and sunset the same day in June, 1864. Twice their number joined them 30 miles from starting. Nearly all the horses had grazed on the prairie the previous night.
All that were fed at noon were sick at night. Those not fed were not sick. Grass had been their usual diet. Waiting till their work was done had become the habit of their lives.

The co-operative plan of purchasing stallions has been a success in most instances where tried. It enables a few farmers to sehorse of real merit without being entirely dependent on the patronage of others who like a good thing cheap.—ZIMBI HODG-SON, Healy, Ill.

Yours came to hand a few days ago, asking ne to answer a few questions. I would not like to answer as important questions as l deem them to be without giving reasons for my conclusions, and possibly this might take up too much space in your valuable paper. In reply to your first question, as to the breed apted for the all-around work of the farm, I would say that depends to a great extent upon certain conditions. For instance, the farm is level, or even slightly undulating, and located some little distance from town, necessitating more or less travel back and forth. In my estimation a cross between a speedy, well-formed French coacher and a good large mare would be just the right thing. But, on the other hand, if the farm be close to town, where nothing but steady work is required, I pronounce in favor of the Per-cheron or Suffolk breeds. Should the farmer wish to dispose of his team, he can readily do so if they are good, sound, heavy draft ani-mals. Or, if the work is not too hard and constant, and he sees fit to keep a team of good brood mares, the progeny of either of these breeds will soon mature into something that will bring him good returns. In point of merit, I consider the Percheron and Suffolk Punch about equal, save that the former has decidedly the best foot. No other type of draft horse can compare with him in this reto the running gear of a wagon, alongside of a gentle horse. Have someone to walk alongside of the coit until it gets used to the rattle of the wagon. Get out in the rect attle brute that seems punished when required to

keep pace with a snail.

I would halter-break a colt at the age of

ness and gentleness, allow plenty of good, nourishing feed that he might grow and thrive, and at the age of three years put him at some light work; such treatment insures docility. I have rarely experienced the least trouble in breaking colts from Percheron, Suffolk, or French coach stallions when handled in this way.

A mixture of rolled onts and bran is good to sustain the museular avestern for hard work.

to sustain the muscular system for hard work. Corn is also an excellent food for this purpose

in a cold climate.

I think the co-operative plan for the purchase of a stallion for breeding purposes might be made to work successfully under certain circumstances. Of course, it would depend very materially upon the character, experience, and general intelligence of the men forming the combination. In a locality where a Grange exists, a number of its members who know each other well and are disposed to work together in harmony, might disposed to work together in harmony, might make this scheme prove vastly beneficial to themselves and neighbors, as they could afford to purchase a number one stallion and fix the service fees at a reasonable figure.-

recent date asking our opinion of the best breed of horses for all-around work on a farm. In reply to this will say that it is an impossible question to answer, from the fact that in some sections they require very heavy draft horses for doing their work, as they drive to town very slowly with heavy loads, and a free and easy going people that are in no hurry to get home again are perfectly con-tented with a slow trip; whereas in other sections you find an entirely different class of people that will want to make a quick trip to town behind a high spirited driver and so n return, etc. So as to breeds, etc., that is most demanded in different sections would depend entirely upon the inhabitants of said sections. We are very glad to say that by pleasing a man with his idea of a horse, it almost invariably occurs that the horse has not only suited his neighborhood but also

In your letter you wish to know how we would treat a horse after a day of hard work in warm weather. Will say in reply to this that we think a horse should have a small amount of water and hay to eat until cooled, etc., when it should have what water it wants after which it should have its grain and ther thoroughly cleaned and bedded for the

night, etc. You also ask what feed we would recon mend to feed horses to keep up muscle, etc. Would say that we think oats is better adapted to this purpose than any other one kind of grain, although we think a change of feed is quite desirable in keeping a horse

with a good appetite, etc.

You also wish to know what we think of the co-operative scheme of farmers forming : company and buying a stallion for breeding purposes. We think this is often very successful done to the great benefit of the neighborhood getting the horse.—POWELL BROTHERS, Shadeland, Pa.

In reply to your letter, I will say I am glad to answer the questions to the best of my knowledge. I have tried all breeds of horses, and have found that the Percheron horses are the best all-around horses for the The best way of raising and breaking a colt

is to not wean it until it is used to eat grain with its dam; then tie it in a halter and give all the oats and bran it will eat, and at three years old hitch up with a gentle horse, and ere is generally no trouble in working it. After a hard day's work in the field on varm day I generally wash the places where the harness rubs and allow them a little water if hot. Let them eat hay for a while,

then let them have plenty water. Feed oats, and after a few hours put them in a good pasture during the night. Oats form the best feed for hard-working animals.

I think it is a very good idea for a number of farmers to purchase a good stallion for breeding purposes. They, together, can afford to buy a good number one horse, and then they can raise good colts. They have the same horse right along, and are more apt to raise matches.—E. F. KLEINMEYER, Wil-

An English Shire cross with Percherons

gares to Shire horses. We feed and halter our colts when wear ings, feed and break to harness when two ears old, and use carefully at three years old. Work a horse carefully, and give rest in hade every three hours in warm weather Feed bran from wheat, ground oats, with

We think very little of the co-operative scheme. Many owners lose the horse by this operation.—MARTIN'S VALLEY STOCK

A Farm Stable.

The illustration we here show is building that is convenient and practical for a farm stable. It is 25 feet wide by 40 feet long and 20 feet high, making room for four horses and vehicles, harness,



and feeding bins. The box stall, in addition to those used as regular stalls, will always be found convenient for reasons best understood by those who handle horses. The loft for hay is ample for the storing of hay or grain, and when necessary it can be so arranged that the hay can be pushed down into the manger of each stall from an opening in the floor over, the stall a convenience that does away with carrying it down the stairs. littering up the lower floor and creating unnecessary work so easily avoided by this simple arrangement. This building can be built for \$200, and built substantially. The construction of it can be saved if you are handy with tools and the cost cut down about one-half.



GROUND PLAN.

A hav window at the end is within easy reach of the wagon, and the block and tackle or a hay harpoon makes its removal from the wagon to the loft an easy task. The ground plan shows the arrangement fully. The letters D for This is called a weed in Great Britain, door, S for stairs, W for windows, H for but is a hay and forage crop in Belgium, six months, accustom him to be handled from door, S for stairs, W for windows, H for but is a hay and fora that time on, treat him with uniform kind-harness pegs will indicate each thing or France, and Russia.

fixture, F being for feed bins. This plan is simple, neat, and practical, such as any farmer requires. J. W. CAUGHEY. SHEEP AND WOOL.

BETTER TREATMENT OF STOCK.

be a sorry failure. The Great Profit of Making Animals

EDITOR AMERICAN FARMER: The severe competition in stock raising, the wide difference in results obtained by different farmers fift only in different sections of the country, but by neigh-boring farmers, lead to the conclusion that there is a cause for all this, and that the remedy can be found. consideration of this subject need not be confined to older countries. It must begin at home with the means that surround the farmers. Shrewd, observing farmers have always noticed that their farm animals do not keep in comfortable condition so easily during the hot, dry months of July and August. This cannot be accounted for on the score of lack of feed and water, although such lack must increase the troubles. It is to be attributed largely to the lack of shelter from the broiling rays of the sun and the annoyances of flies and other insects that make life almost unbearable Notice the unrest and discontent of cattle and colts; mark the misery of hogs and the utter abandonment of sheep to all sense of danger and appreciation of safety. A closer inspection will reveal

It is not alone sufficient that ample pasturage is provided; that plenty of good, pure water should be ready of access. A system of comfort outside of and beyond all these alone will serve to give comfort, quiet, repose, and thrift. It is not unusual to find horses and dairy cows in cool, clean barns with doors and windows screened against flies and mosketos, or so closely shut as to be dark and cool during the long, sultry hours of the Summer day, with a supply of forage and water regularly given them. This is in grateful contrast to the average treatment of farm animals in the Summer time on Western farms, but when 'once begun will not be abandoned.

the fact that flies, fleas, ticks, and worms

are the cause of this horrible existence.

Not alone is this confined to cattle and horses. In one instance, many years ago, the writer was visiting Vermont flocks in the hottest days of August, when even a Green Mountain pasture was a hot place; too hot, in the judgment of the painstaking humane Merino breeder, for his sheep. The flock had been to pasture since daylight, and at 10 o'clock had been brought to the barn to lie on clean bright straw, as fragrant as new mown bay, and chew their cuds with comfort until 5 o'clock in the afternoon, when they were returned to the pasture for a couple of hours be-

The hogs on this farm, though few in numbers, were luxuriously cared for. This treatment was humane, and it was likewise profitable. There are plenty of such instances not alone in Vermont, but all over the country, wherever intelligent, prosperous farmers are found. It may be a question whether stock are willing to quit the pasture at 10 o'clock, or any other hour before high noon, and be confined as outlined above. It may ground becomes moist when the hungry, tormented animals are so anxious to fill themselves. This is true, but the cerainty of finding a cool retreat and a supply of forage in the barn would cause the animals to meet the attendant promptly, to the minute, to be transferred from the purgatory of a pasture. The reader, if he has not reached such a system of caring for the farm animals will suspect that this article is advocating some method of "soiling," which has been considered "book farming," and hence expensive and impractical.

The subject of soiling has long been discussed and largely ignored by the average Western farmer. This, like many of the other practices and traditions of the past inheritances of the fore fathers and relics of a respectable but antiquated language has to be resorted to-accepted as a factor in a better agriculture and a more reliable, permanent system of stock raising. Like other changes, it must come when nothing else will do; when there is nothing else to meet the emergency, and the sooner the better. The time is already past in this country for simply keeping stock. The present system may be denominated raising stock, but the culture of farm stock means the highest and best processes and principles and in connection with intensive farming. This is the future of all live stock industries in countries that have or shall reach the highest and most prosperous agricultural development. The few who have excelled d surpassed their neighbors are the pioneers, the leaders, and their example will be taken up by others and finally become the practice of all.

It may be considered by the many as too expensive with the price of labor which prevails at present in this country.

This is the usual view taken by the many, but as lands increase in value, and farm products increase in value, it will be found that two acres of land can keep four steers and proportionate number of sheep, etc., instead of the same acre of land keeping one steer. And it will be found that less time will be required under most economic arrangements to attend to stock in this way than is now believed possible. In other words, it will be found that it is the only way to profitable stock raising, and it will b done.-R. M. B.

A crop which will produce a good yield of forage and hay upon light soils is one of the things that we need. Michigan Station thinks we may have it in Spurry, an annual which they have recently been testing with good results.

tation in Virginia?"

Shearings.

A poor sheepman with poor sheep will

Clean, bright, fleshy lambs sell on sight. Remember that. Sheep stealing is largely on the in-

crease in some of the Australian colonies An era has been reached in American sheep husbandry in which no Nation on earth can expect to shut us out

When a sheep is to be sold put it in the best possible mutton condition. Never think of selling a thin, poor sheep on any account. Last year Arizona marketed 5,400,000

pounds of wool and 100,000 muttons.

The sheep industry is gaining rapidly, and already exceeds all of the live stock industries. Don't allow the boys to tease the stock ram. A butting ram is a great nuisance as well as a dangerous animal, and the

boy that taught him to butt does a low, criminal act.

Lamb raisers manage to boom the ewes judiciously from the time they take the

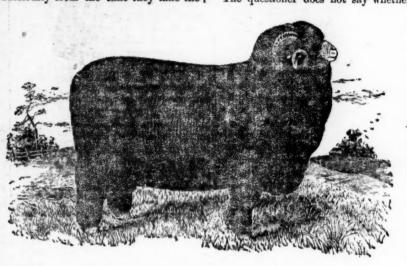
would you do with a 1,000-acre plan-

It is to be regretted that more definite Frightful Decrease of Sheep Values in information was not given of this old plantation. The term "old" is a safe conclusion, since much of these lands were in cultivation long years, perhaps hundreds of years, before the founding of the Jamestown Colony in 1607. This is shown by the statements of the early colonists that large supplies of corn were gotten from the Indians then inhabiting that part of Virginia.

A typical Virginia plantation of 1,000 acres usually contains from 40 to 200 acres in cultivation and the balance consists of old pine fields. This latter means what it says-fields that have been turned out and have grown up in pine trees to recuperate by the forces of nature. This system of farming has been practiced certainly since Colonial times, and may have been taught them by the Indians, as it is so unlike any other people that we now know of.

About these old pine fields there is much significance in that there are so few large trees. The original forests are wanting as found in other parts of the United States; at least, on lands where cultivation is possible.

The questioner does not say whether



MERINO RAM.

We present a cut of the Merino sheep, which may serve as an object lesson for the student of sheep husbandry in this country. It is a two-year old ram, dropped in the Spring of 1880. This ram may be considered a standard American Merino in every respect. "Two days before he was two years old he weighed 206 pounds, and clipped the same day 41 pounds." He was shorn each year before a committee, and these figures are from the official record.

ram until the lamb is dropped. This | there is a mortgage on the plantation or gives the lamb a send off and prodigious not; nor does he tell how near it is to results are secured

The recent cut on prices caused by the rush of Texas sheep on the Northern market and the accumulation of ewes, will give the lamb raisers cheaper ewes for the coming crop than has occurred

The well bred, well fed, and properly managed flock is exempt from the curious and fatal ills that usually come to the ordinary sheep raiser. We have not learned, as we shall, the importance of vigorous health in overcoming diseases. If this resistive force is lost there are opportunities for latent ailments that were not suspected and losses result. On this statement we pin our faith in profitable sheep raising.

An examination of the statistics of l'orses, horned cattle, sheep and swine of the country shows some surprising things Placing our population at 65,000,000 be observed with what reluctance the we find that there is but one horse for will give the best horse for the all-around work of the farmer. We breed Percheron evening as the atmosphere cools. The per capita; that there is but a trifle over three-fourths of a horned cattle for every unit of population, while there is but two-thirds of a sheep for every person of the population.

Millions of locusts, fat and immense in size, have made their appearance on the sheep ranges of the Big Horn Basin. The insects swoop down upon the sheep in swarms, when they are eagerly pursued by the animals and devoured. As a fattening diet they are said to be superior to the best grass upon the ranges, and sheepmen are seriously thinking of devising some means whereby the insects may be propagated and preserved, to be fed to the sheep during the Winter months.

A correspondent complains of getting \$3.75 per 100 pounds for his Spring lambs, while a neighbor received \$6 for his, and asks why this cruel difference? We do not think it worth while to offer any explanations in this case. It is safe to conclude that each man received all his lambs were worth. There are farmers who think it all foolishness to breed for first-class lambs: who do not believe it pays to feed for \$6 lambs; who do not snow how to make plump 60-pound lambs at eight weeks old; who think it too much trouble to produce Easter lambs, which bring a better price than June lambs. No, we can't tell why all these differences in values of lambs. Just keep run of your neighbor's managements and methods and you will find a better explanation than can be attempted here.

Notwithstanding the uncertainty that confronts the sheep raisers, there never has been a time when the farmers of this country were so anxious to find rational. substantial information that can be turned to their practical and material advantage. The fanciful and unreal has not a ray of comfort; these no longer interest the progressive farmers; they look for the information that will give the best results in the shortest time and at the least expense. It is found that much of the artificial, impractical, and played out notions of the past have to be abandoned or the sheep industry must be given up until the old conditions are restored. Such returns are impossible. The country realizes the hopelessness of waiting, and at once turns attention to such adjustments with what seems to be the permanent conditions, such as the demands of the produce market, the wants of the woolen manufacturers, the wants of agriculture and the competitors, both domestic and foreign. There are open opportunities, and the progressive sheep raiser is hunting for them earnestly.

What to Do With an Old Pine Field in Virginia.

A Virginia gentleman asks, "What

markets and transportation facilities. While these things would be important to general farming, it would make little difference to stock raising, nor to me, since sheep raising would be the business to which the farm would be devoted almost exclusively. Tobacco, the prime money crop of the

Old Dominion from Colonial days, would not be raised at all. The plowed lands on the plantation welld be devoted to grasses and clovers from the very first. The use of fertilizers would be depended on the first year at least to encourage a stand of clover, after which the manure from the flock would answer all pur-The old pine fields would be syste-

matically cut off and the land devoted to sheep pastures. Orchard grass, scarlet clover, alfalfa, and red clover would meet all demands for pasturage and meadows. Pine stumps do not sprout like oak, and will rot out in three or four years, when the ground may be d and appropriated for meado

not be attempted, depending upon cir- destructive to timber. cumstances.

The main object in keeping sheep would be mutton, mutton lambs, and in time the raising of lamb mothers to be sold to farmers. In the start I would use ewes from the ranges, grade Merinos shearing seven pounds or as much more as possible. These would be crossed with Dorset rams, the best that could be found. The ewe lambs would be carefully retained in the flock, and in time the Dorset characteristics would be established. When the flock should reach | from such places. the carrying capacity of the farm, the four and five-year old ewes would be sold after being bred to Dorset rams. It would be an accommodation to farmers to supply them with reliable ewes of this class, and they would be willing to pay an extra price for them.

As a precaution against dogs, I would use a dog-proof fence, besides keeping an eye on all neighboring dogs, and practicing such quiet measures as would protect the flock.

Something About Buying a Ram.

If it is necessary to buy a stock ram this year, the subject is of sufficient importance to give it the most careful conideration and reflection.

The selection of a breed, though im portant, is not the intention here, further than to say, let the new ram be a typical representative of the breed. The size of the ram need not be of great account, as a well grown, well developed sheep is in every respect preferable to an overgrown imbecile that looks well, but may not breed at all or give no character to his

While a ram may breed better than himself, it is not desirable to take an inferior animal on the presumption that he will.

In selecting a breeder from whom to buy, inform yourself as to his reliability and veracity. If he is not right himself in these there can be no assurance as to what he sells.

Learn if the breeder is a liberal feeder. for the keep that made the ram must be kept up or the whole thing will be disappointing. The ram must have as good or better care and feed or not keep up.

A lamb may be used if the flock is small and he is properly managed and well fed. For full service a two or three year old is preferable. An old or aged ram should not be used even as a gift.

The stock ram should be secured at an early day and transferred to the has registered 530 sheep since Jan., 1, used to the new home and kind of treat-old, we think we have done well.-H. A. ter satisfaction if this is done.

DIMINISHING NUMBERS.

Washington County, Pa.

As a result of the talked-of change in the tariff on wool, a shrinkage of \$10. 000,000 in values in Washington County, Pa., alone is recorded. Recently at the sale on the Gillespie farm 250 sheep were sold at a sacrifice. Good two-year-old ewes and wethers brought only \$1,20 per head; four-year-olds, 93 cents per head; nice straight Spring lambs, 80 to 95 cents per head. A year ago these would readily have sold for \$2.50, 83 and 89 respectively. The farmers present said that with a prospect of free wool staring them in the face they did not care to in vest in any more sheep.

According to the census of Washington County contained 4 1,120 sheep and the wool clip amounted to 2,-416,866 pounds. If the clip of this year is as large as that of 1880, it is easy to see that the free trade attack on the tariff has taken \$141,686 out of the income of wool growers. If the 461,120 sheep were valued at \$3 each, the total would reach \$1,383,360 and the depreciation fully 50 per cent., or \$691,680. which, added to the loss on the wool clip, gives \$933,336. In 1880 more wool was grown in this country than in any other in the United States. As nine out of 10 farmers grew wool, land was valuable, The County contains 446,463 acres, recently valued at \$80 per acre. With the prospect of free wool the price has dropped to \$60 per acre.

The Southdowns.

Southdown sheep breeders cannot be otherwise than proud of this well known and highly prized breed of sheep at the World's Columbian Exposition. The American Southdown Breeders' Association has well used its powerful influence to the end that the exhibit should be a respectable one, and the large number and fine quality of animals that were found for competition was convincing evidence that this work had not fallen on unfruitful ground. The Southdowns, it will be seen, are yet leaders in the race for popularity as to mutton breeds -the farmer's sheep.

For the special premiuns, amounting to \$1,250 in cash by the American Southdown Breeders' Association, the following-named breeders made entries: W. E. Spicer, Harvard, Neb., 12 animals; F. A. Scott, Huntsville, Mo., 13; J. H. Potts & Son, Jacksonville, Ill., 7; J. R. Harvey, Turlington, Neb., 9; T. B. Bonnington, Grafton, O., 8; John Jackson & Sons, Abingdon, Ontario, Canada, 26; D. J. Jackson, Abingdon, Ontario, Canada, 9; F. W. Barrett, Wadsworth, N. Y., 13; A. Telfer & Sons, Paris, Ontario, Canada, 4; John Rutherford, Rossville, Ontario, Canada, 2; T. G. Douglas, Galt, Ontario, Canada, 18. Entries were also made from the

flocks of W. D. Irvine, Danville, Ay. R. M. Fisher, Danville, Ky., W. U. Noble, Brecksville, Ohio, Geo. Mc Kerrow, Sussex, Wis., Frederick Billings Estate, Woodstock, Vt., and Geo. Baker, Simcoe, Ontario, Canada.

Something About Sheep Pastures.

The grazing of mountain ranges in California and similar regions with sheep has lessened the rayages of forest fi The raising of grain might or might which were so dreaded by settlers and so

THE AMERICAN FARMER called the attention of sheep farmers to the question of providing shelters from the hot suns of Summer a year ago, and insisted that shade was as important as protection from rains. Every observant man knows how well sheep appreciate a cool, dark place, where they can get away from the hot sun and the annovance of flies. How quickly they find the shadow of a tree or bunch of brush; how nearly impossible it is to drive them

We beg leave to renew our suggestions of a year ago on this subject and ask that sufficiently roomy shelters be provided in every division of the pastures. Do this so wisely, following the instinctive preferences of the sheep for the points of land, and there put the sheds of whatever sorts are decided upon. A shed of brush three or four feet high is better than none. A straw shed is the very worst of all, since it will soon get out of shape and water soaked so it will rain for a week after the rains cease. A good shingle roof is the best and cheapest in the long run.

The wetness of this Spring favors the excessive growth of pastures and the unwholesome qualities of the grasses. To obviate possible troubles arising from such rank, foul conditions, the prudent farmer will subdivide with fences and confine the sheep on such areas of pasturage as they can feed off close without stinting them too closely.

In changing sheep from a short pasture to a better bite of grass avoid turning on while the grass is wet. It is hetter to let the sheep into rank pastures for an hour only, and the afternoon, until they are accustomed to large supplies of

Lincoln Sheep Thriving.

EDITOR AMERICAN FARMER: Notwithstanding the dull times, the Lincoln sheep trade thrives. Sheepmen are finding out that they cannot live by wool alone, and in casting around for a breed to cross, many try the Lincoln. A man who has once used this breed for crossing becomes an enthusiast over them. I have shipped Lincolns to Ohio and Indiana and over Michigan, and bave inquiries from Montana, Minnesota, Iowa and Arkansas. Customers write they are well pleased with the stock (have had nothing but praise of stock so far). Our Association farm, where he may be resting and get 1893. For an Association not two years ment he is to receive. He will give bet- DANIELLS, Secretary Lincoln Sheep Breeders' Association.

being served."

forgive me?'

seated. It was Laura.



charms were utterly irresistible.

parisons.

A turkey?

once more! Ever aloud with a gesture of satisfaction, much since his quarrel to the surprise of a young lady who with Laura Gray in the Summer he chanced to be passing him at that mohad been paying desultory court to ment. Dorothy Pearson, and now, hearing that Dollie had just inherited a outburst just recorded George Speed-

sweet little legacy from a recently de- man quickened his pace and a few minceased maiden aunt, Leopold-or, as utes later was standing in the presence his friends were wont to style him, Poly of the fair Dollie's maternal relative, —had come to the conclusion that her presenting with the most graceful and insinuating manner he could command If Leopold did occasionally experi- the unfortunate bird, which he relied ence twinges of remorseful regret for the upon to wing him into a favorable posiold delightful days, he carefully con- tion for laying siege to the daughter's cealed his feelings, and with all the im- heart.

petuosity of his nature he resolved to What his success was may readily be beat George Speedman out of the run- surmised from the fact that when, in rening, win the fair Dolly-and her leg- sponse to Mrs. Pearson's invitation, he arrived later in the evening of the same acy-for his own, and live happy ever day to dine with the family the good As Leopold sauntered through the lady met him at the hall and whispered town a happy thought struck him. He that Dollie was alone in the drawing would send Mrs. Pearson a Christmas room.

gift-something which would influence George entered the room with a her to countenance the proposal he in-tended making to her daughter at the there is best known to Dollie and himearliest opportunity.
What should the "something" be? self, but it is a significant fact that when, half an hour later, the young couple emerged in response to the sum-No. That might suggest odious commons of the dinner gong Dollie's cheeks were in hue like the deep heart of a crimson rose, and there was an extremely long silken hair clinging to ter was dressing for a walk. "Mr. Lev-George's manly waistcoat.

Just prior to the announcement of dinner Leopold Leverton had arrived in a condition of pardonable anxiety as to the result of his strategem.

It was doubtless very considerate of Mrs. Pearson to keep him engaged in conversation with herself in order that the privacy of the more fortunate gentleman, who had come to woo, might be uninvaded; but he was extremely perplexed and chagrined that Mrs. Pearson made no reference to the superb turkey.

"You will stay and take dinner with us, Mr. Leverton?" she said, still without mentioning his gift. It was passing strange.

"Thank you," he responded, mus-

Then a terrible fear took possession of his heart. Had the dealer forgotten

"I-ah-did-you-ah-receive-a Laura?" -a turkey this afternoon, Mrs. Pearson?" he stammered.

exclaimed Leopold. "I must see about

He was, as has been previously remarked, an impetuous young man, and before the others could recover from their surprise he was hurrying down the

"Who lives at 71?" asked Mr. Pearson after a short interval of silence.

"The Grays," answered George promptly. "Moved in last week." Had Leverton stayed one moment to reflect on Speedman's words it is probable that he would have sacrificed a dozen turkeys rather than risk meeting the wrathful pater of his discarded lady love, but so bewildered was he that the possibility of such a contretemps never entered his mind.

The advent of the fateful fowl, with Leverton's note attached, in the Gray household had caused almost as much bewilderment in that household during the afternoon as Leopold was himself experiencing at that moment.



WITH DOLLIE LEANING UPON HIS ARM.

Mrs. Gray unpinned the scrap of

Why, Laura, Laura!" she called. running up to the room where he daugherton has sent us a turkey!"

Laura let fall the brush she was using and stood gazing at her mother in silence. Then the color mounted to her cheeks, but she did not speak.

Laura read the lines and returned the paper. She was still strangely silent. and her mother, anxious to have an expression of opinion from someone else, trotted off down stairs again to consult Mr. Gray as to what should be done. Laura followed her closely.

Mr. Gray took the slip of paper in his own hands, read it carefully, re-read it and then turned it over, as though seeking further enlightenment.

His eyes fell upon the line which had been written by the lad with the poetic

Let the dead past bury its dead. "I suppose he means he would like us or omitted to send the bird? He could bear the suspense no longer.

He could to let bygones be bygones," replied Mrs. Gray slowly. "Don't you think so,

"Yes," said Laura very softly. The afternoon wore swiftly away. "Yes, indeed, and a fine one it is. faint appetizing odor arose from the Ah, there is the gong. Come, Mr. Lev- kitchen and gradually permeated the apartment.



At that moment Speedman entered |

Right, sir.' By a curious coincidence-or it may upon his arm. "Mrs. Pearson-Mr. Pearson

have been a fatality-George Speedman strolled leisurely up, unseen by Leopold, who walked off light heartedly before "No. 71 Park Road!" said Speed-

"NO. 71 PARK ROAD."

turkey it should be!

want it sent.'

memorandum sheet.

ever, escaped notice.

it at once, won't you?"

Yes. That was the very thing;

He immediately proceeded to put his

design into execution, and after exam-

ining a considerable number of obese

fellow eminently qualified to arouse Mrs.

Pearson's housewifely admiration and

mellow the heart of her rotund little

I'll write you the address to where I

"Certainly, sir. Here you are, sir," and the shopkeeper handed Leopold a

Now, it chanced the poulterer's er

rand lad was one of those poetic souls

who, in accordance with the eternal un-

fitness of things, are to be found in all

parts of the civilized globe engaged in

the most prosaic and uncongenial occu-

pations, and he had in an idle moment

inscribed upon the back of the slip of

paper a line of Longfellow's which had

taken his fancy: This inscription, how-

No. 71 Trotterville Terrace, Park Road

just pin it to the turkey. You will send

"Immediately, sir," replied the trades

man, briskly. "No. 71 Park Road, sir.

"There," said he, "that will do, I'll

ton, and he proceeded to write:

With Leopold Leverton's compliments.

That will do capitally," said Lever-

"Just give me a scrap of paper and

man, mentally. "What's Poly been ordering for No. 71?" He turned and looked into the shop.

"What does this weigh?" inquired George, indicating the one Leverton had just purchased and which still lay on the stall with the scrap of paper conspicuously attached. That one's sold, sir. Here's one

that 'ud pass as twin brother to it." said George, perusing the lines which his rival had penned, "well, weigh

Oddly enough the same happy thought had occurred to him which had been

conceived by Leverton. "Thank you, sir. Where shall I send

"Oh, I'll take it, thanks," replied Speedman. And straightway he trudged

off to Park Road with his burden. There was a puzzled look on his face as he picked his way through the crowds of holiday makers that thronged the town, and it was still there when, having left the shops and throngs behind him, he stopped for a moment to light a cigar. | must have it repainted." Hardly had he proceeded a dozen

the dining-room with Dollie leaning ally intensified until at the hour when gratulate me. Dollie has promised to be my wife."

It was George who spoke, with sparkling eyes and triumphant tone. Leopold could scarce believe his ears.

"What?" he cried, while Dollie hung her head and blushed bewitchingly. "Yes. May I congratulate you on having resumed your engagement with

Miss Gray?" answered George, seating himself beside Dollie. "Wha-what do you mean?" stammered Poly, hopelessly bewildered.

"Oh, nothing. Only I thought as you were sending them a turkey you must have "-

It was now George's turn to look surprised. "I don't understand. There's some mistake. I ordered one to be sent here, hoping Mrs. Pearson would accept "-The one I saw was addressed to 71.

interrupted George, thinking he began to see light. "Yes. This is 71, I noticed the num ber on the garden gate as I passed this

morning."
"No," chimed in Mr. Pearson, "this is 171. I noticed the other day that the first figure was almost washed out. We

"Then my turkey has gone wrong,"

As time passed this faint odor gradu-Leopold Leverton, having with some difficulty discovered the real No. 71, panted up to the hall door thereof the fact that a turkey was being prepared for table might have been guessed by any chance passer who happened to be gifted with a critical discrimination in the way of savors.

Steps sounded in the vestibule, the handle rattled, the door was thrown open and a dark figure stood in the doorway. Poor Poly in his impetuosity had never thought of how he would explain his errand, and now as that savory scent floated from behind that dark figure and struck him full with a sudden warm gust he began to stammer something

about "a mistake" and "a turkey." Mr. Gray, attributing his confusion to the awkward predicament in which he found himself through having broken so shabbily with Laura, and thinking with an accession of that "good will to all," which often comes over men at the glad Christmastide, to help him out of his difficulty, put torth his hand and half dragged Leverton into the house.

"There, there," he exclaimed, "you're strange fellow, but if you can make it up with Laura all well and good."

"Mr. Gray," said Leopold, regaining the use of his tongue as his outdoor garments were taken from him, "it has all

As Leverton entered a lady rose from moved.

Somehow at sight of her standing there, looking so fair and so sweet in her evening costume, Leopold forgot all about the lady of the legacy, and a sudden feeling of shame stole into his heart and caused the warm blood to rush up into his cheeks. There was a moment's awkward pause, and then he said, bravely:
"Laura, I have been a fool. Can you

"It was I who was to blame," she mur-

mured, brokenly.
So he dined off that erring turkey after all, and that is how it came about that when George and Dollie were marin the ensuing Summer there was also a wedding from 71 .- Boston Globe.

THE APIARY.

EXTRACTED HONEY.

A Writer Who Claims That it Can be Profitably Produced. TT.

EDITOR AMERICAN FARMER: At the close of the honey harvest, set at convenient places in the apiary, or better still in the honey house, near an open window some bottom boards. Set them level and solid, as they will have to sustain a heavy weight. If these boards are placed in the honey house they must stand in a bright light, else there may be a failure.

whatever tool you use to open your hives. Remove the cover from a hive and give the bees a smoking, sending the smoke at intervals down between the ranges of combs when the bees are mostly down. Remove the top case and set it on the cart. If robbers trouble place a cover or throw a cloth over the case. Repeat this operation with all the cases in rotation, then place the cover on the hive and repeat this operation with other hives until you have all the cases tiered | too much truth in the assertion. Honey up on your cart, so that you can readily is thrown from the combs before the wheel. Move them to one of your pre- water has evaporated and the honey bepared stands and pile them up as high as is convenient. Place, a board (a hive the bees the expense of sealing over the cover is used in our apiaries), with a hole combs. The result is, as in the case of cut through the center four or five inches friend B, "it don't have the flavor of in diameter, and over this is placed a the comb honey." Now, we will make wire cloth cone large enough at the base the assertion that honey well ripened on to cover or surround the opening in the the hive in well-sealed combs, extracted board and terminating in a small hole at and subjected to a ripening process after the top just large enough to admit the passage of a single bee. Of course, this cone must be fastened securely to the cover, and there must be no place in the in the snowiest of combs and the cleanest pile of cases that will admit the passage of sections. There are a number of of a bee except the hole in the apex of the wire cloth cone. This calls for clear, claim to produce a strictly first-class dry lumber, a perfect mechanical job of article of extracted honey by ripening dry and out of the reach of mice when independent of the aid of the bees. not in use, and every year or two treated They may be able to do it, but the

'thrown together" or made of poor, source of "trouble and vexation of spirit," and the same applies to other supplies. But let us return to our pile of cases which we left partly filled with the bees of different colonies.

The light only entering at one point, and that point at the top, the bees seek it and through the large opening in the cover pass into the wire cloth cone and thence into the open air, and if the opening in the cone is the right size there will be no returning to the cases. They will quietly disperse and return to their respective hives. Of course, for each pile of cases we need one of these cone escapes, and it is the only kind we think we would care to use, and were we taking section honey we would not fuss with a board for each hive and a 20 or 25 cent bee escape fitted to each one. The writer used this method over 20 years ago when bee escapes were unknown, and managed an apiary of 400 colonies with no help whatever except the assistance of a little boy in the honey room when extracting the honey. Long before the last case is removed from the hive, if the apiary is large, the first pile of supers are cleared of bees and ready to be extracted, and they can then be wheeled into the honey

house (if they were piled outside). The reader will notice that we have removed the honey from our bees without moving a frame from its place or using a bee brush or being followed around the apiary by a buzzing horde of troublesome robbers. By this method one good hand can remove more honey in less than a half day than can be emptied by a good two-frame extractor in 10 hours, and this, too, in the heat of the day at a time when honey is not being gathered, and where by the old method a man could not work without a bee tent.

The honey house should be provided with screen doors and windows and should be bee tight.

Wire netting should be nailed on the outside casing of windows and extend above the opening several inches, leaving a space between the casing at the top and the wire so as to form an escape for any stray bees that might find their way into the room.

We now need a table, on which we will turn a case bottom up, loosen the set screw, and a slight jar or push will usually loosen all the combs, and the case can be lifted off, leaving the frames of honey in a pile on the table. Shallow pans a little larger than the cases should set on the floor, and as fast as the

"Yes, yes," interrupted Mr. Gray, placed in the cases and tiered up in the but you will find Laura in the drawing pans, thus taking up the drip that would otherwise go on the floor. As the combs are extracted and replaced they should He pushed the unresisting fellow into the drawing room, and himself remaining outside, closed the noor behind him. ready for the Fall crop and protected the fauteuil upon which she had been from the ravages of the bee moth until cold weather, when they can be re-

> Near the comb table should stand the uncapping can. This is about the size of a large extractor can, with a framework across the top for the comb frame to rest on, and a screen or sieve a few inches from the top to catch the cappings and drain them into the can below. A honey gate at the bottom draws off the honey when you are through work.

> This is the Dadant uncapping can, and is the most complete article of the kind we know of. There are other and cheaper devices that will answer the purpose equally well. One man uses a arge butter bowl with a hole in the bottom. A tin pipe fastened in the hole and the lower end of same inserted in a hole in the head of a small barrel, the top of the bowl covered with screen wire to catch the cappings, while the bowl revolving freely on the barrel makes the comb handy to get at.

> The extractor should set high enough from the floor so that the honey can run into the bunghole of a barrel or into some large receptacle. If the apiary be a large one, it will pay to have one part of the floor higher than the other, and then the extractor will not have to be raised so high from the floor in order to let the honey into the barrel or tank. A tin can holding 250 or 300 pounds, or a wood tank lined with tin and holding a much larger amount, is very convenient, but any receptacle should have a honey gate at the bottom to draw off

the honey.

There should be a cheese-cloth bag Get the hive cart and smoker and for the honey to run through as it passes from the extractor to catch the cappings. We will here remark that the shallow frames should be of a size that two of them will go into the extractor where one of the large ones are placed.

RIPENING THE HONEY.

Objection is made to extracted honey because it is inferior to comb honey, and we regret to say that oftentimes there is comes thick to save time(?) and save set it in deep cans in the sunlight and and year out unpainted, they will be a did evaporate and the honey became weather often granulated and tasted good; but when you dipped a spoon into the jars of honey from the sealed comb ripened on the hive, the difference was so marked that the merest tyro could

notice it. But to return to our subject: Extracted honey is apt to granulate at the approach of cold weather, and before that time should be placed in whatever package it is intended to sell it in. We wish to say, however, that all pure honey does not granulate when in the liquid form, as many people imagine. If our honey has been kept in a warm room through the Summer (a very excellent plan is to set it where the bright sunlight from large thing else, is principally governed by windows will strike it, and if the honey house is painted a dark color on the outside it will absorb more solar heat than if it be white), by early Autumn it is ready for the market.

PREPARING THE CROP FOR MARKET. ket there are many things to be taken into consideration. One is the quality of the a customer keep him. Always give him honey., If the honey is clover or bass- 16 ounces for a pound, and never sell wood, and as good as such honey ought to be (and is, if it has been handled as and this man will be a walking, talking outlined in this article), we have found no better way of placing the same on the retail market than to use the chase of you. Place a label on every This will hold about three pounds of honey, and is of use in every family after and telling your customers the kind of the honey has been consumed, which cannot be said of many other re- that pure honey very often granulates in ceptacles.

In filling these jars, or any other

small receptacle, it would be well to heat the honey. As it is now very thick you can make it quite warm very easily. The jars stand in shallow pans of water. If we run our jar over it does not spill on the floor and get a dauby mess on our hands, like friend B had when he emptied pailful after pailful into the barrel instead of running directly into the barrel in the first place from the extractor.

As the jars are filled seal them up, and this honey will be found to be so thick that it will hardly run from the jar without heating, and will not granulate in cold weather. For a delicious article of food it is unexcelled by any honey in the comb or maple or other sirups.

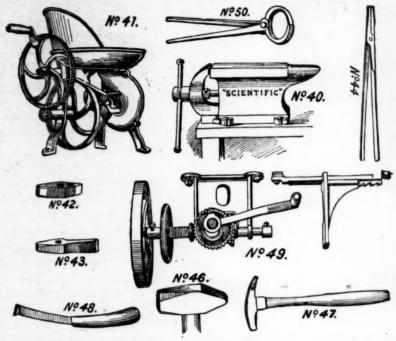
combs are emptied they should be re- price of the honey, thus making the apiary on the State farm, or one to be tion.—H. M. Scorr, Barre, Vt.

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same profit that the retail dealer in glass- run in connection with it. At the last ware does, and at the same time sell our annual meeting a special committee was honey in a most attractive form.

lated form—the small lard pail with sloping sides of various sizes, or the small covered pails from two quarts up. These are excellent to retail honey to a class of vidually, were followed by the appearcustomers. In this case, when filling, the ance of the committee before the and it will become very solid. It can, case presented was a strong one, and the

of hot water. A most excellent shipping package is of the reasons for this preference are: If doors. The location is exposed to winds handled, and hold a large amount to the pine hedge can be grown about it. package. In the case of oak or other hard wood, it is best to wax the barrel; gallons, all that is required is to scald The above makes an excellent package for dark buckwheat or Fall honey. We cover the extra cost of the package.

THE PRICE OF THE PRODUCT. The price of extracted honey, like every supply and demand; but honey gathered from white clover or basswood and well ripened as directed in this article, is cheaper at 15 cents per pound than much of the extracted honey on the market at five cents. Anyone engaging In preparing extracted honey for mar- in this business must create a demand for a superior article, and every time he gets advertisement of what you have to sell, and he will induce his friends to pur-Mason one quart self-sealing fruit jar. package of honey you sell with your name and address printed in plain letters flowers this honey was gathered from; cold weather and how to make a liquid of it, and it is an excellent idea to say also that honey of any kind should be kept in a dry, warm place. And whatever kind of package we use, let us always keep everything very clean and in as attractive shape as possible.

A small volume could be written on the above subject, but as this article is already long, we will bring it to a close. -J. A. NASH, Monroe, Iowa.

VERMONT APICULTURE.

Success of the State Beekeepers at the State Experimental Station.

EDITOR AMERICAN FARMER: The result of active, energetic, organized effort in working for some desired end is again well shown in the triumph secured by the Vermont Beekeepers' Association in | points in New York both by rail and securing recognition by the State au-We can buy these jars by the gross thorities. For several years the associ- and thus beckeepers can easily commuand add the retail price of the jar to the ation has labored for an experimental nicate with and cheaply visit the sta-

elected to secure the result, if possible, Many people prefer honey in granu- This committee entered on the work with honey should not be subjected to heat, at its regular meeting in April. The however, be melted by setting in a can board quite readily acknowledged the justice of the request. They treated the committee courteously, and on the same the wooden box holding two cans of 58 day voted to add beekeeping as a branch pounds each net. These are sold here for experimental work and study: and in the West at 75 to 80 cents per box also voted an appropriation to erect a of two cans, or 65 cents by the 100 building on the farm suitable for a bee boxes. For a few cents extra we can house, honey room, and general utility work; and above all else, all the cases the same after removing from the comb boxes. For a few cents extra we can house, honey room, and general utility should be well painted and stored in the unripe or unsealed honey entirely get a honey gate fitting the screw cap room. The building is erected, and is a on each can, when the package can be turned down on its side on a counter the purposes for which it is designed. to a light coat of good lead and oil writer very freely admits that he cannot. and the contents removed without drip The south side will accommodate 24 I have extracted the unsealed honey and or the admission of flies or other insects. colonies of bees on two shelves. This These cases properly made and cared set it in stone jars in a warm room with Many wholesale men still prefer the feature was added to test the relative adfor will last a lifetime, but if they are a cheese-cloth cover over each jar; have honey keg or barrel for honey. Some vantages of a house apiary and bees outknotty or green lumber or left year in other ways by the dozen and the water a barrel springs a leak (and they often and so it is planned to have the yard on do), it is easy for anyone to tighten up the the southeast side of the house, and prothick, and at the approach of cold hoops. They are also cheap, easily tected by a tight board fence until a

There are five colonies of bees now in the house, and it is expected that some but with the barrel mostly used here for more will be placed there this Fall by that purpose, the basswood molasses members of the Vermont Beckeepers' barrel or keg, holding from 10 to 50 Association, and by next Spring the apiary will be equipped sufficiently to do them with boiling water just before filling. good work. Now that we have the apiary, the next thing needed is an apiarist to take charge of the work. It will would, however, for first-class white need a man who thoroughly understands honey, prefer glass or tin all the time, the art in all its different phases; one and charge enough for the honey to who will hold himself open to conviction. should experiments not work as he expected or desired; one who will keep an exact record of each colony and of everything done; and lastly, but not least, one capable of writing out what is done and doing, both for publication in the bee journals and for the annual report of his work to the director of the station. Fortunately, Vermont numbers among its beekeepers more than one such person, and the only question is, Who will accept the position? The appropriation will not be large at first, and there may be some difficulty in getting one to take the position, but Vermonters are not likely to shirk a plain duty, and I fully believe that they will not be found wanting in this case.

I desire that all beekeepers shall take

> the station, visit it every time that you are in Burlington, propose experiments to be tried, and, in short, assist in every possible way. The beginning is made, and with your active co-operation and interest the Board of Control will never have occasion to regret the allowance which they have made to an industry that represents so much to the State of Vermont. Not alone would I urge beekeepers to visit the station, but all those interested in agriculture will find there much to interest and instruct along the line of progressive and scientific farming, which these experimental stations are doing so much to teach and spread the truth, that "If you would succeed in the present age you must be both progressive and scientifically progressive. Vermont is the second New England State to make beekeeping a branch at its experimental station, and one of the few in the country. Burlington is not merely a local railroad center, but a large one, and is of easy access from water, also points in New Hampshire;

an active interest in the work done at

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In 1891 88 per cent. of the cotton spindles in the country were in the North, leaving but 12 per cent in the South Since that time the whole number has increased from 14,781,000 to 15,041,023, and the proportion in the South has increased to 14 per cent., leaving 86 per cent, in the North.

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THE motto of THE AMERICAN FARM-ER is, "Farming must be made to pay."

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FARMING MUST BE MADE TO PAY. gold now lost to us, circulating among

We are unalterably of the belief that our own people. the one supreme issue before the Ameri-

This far surpasses all other issues in vital importance. Unless the farm can be made to yield a profit to the man who tills it there can be no prosperity in the country, and the discussion of other questions is merely a waste of time. It is like the people of Constantinople disputing over theological points while the Turks were battering in their gates.

It seems trite and commonplace to say that unless the farmer makes money nobody else in the country can continue to do so; but trite and commonplace as this is, it is still the sternest of truths, and the one which, alas, our people are most likely to ignore or forget.

Amid all the talk and the wilderness of theories which deluge the land in regard to the causes of the present stringency, one stubborn, unquestionable fact stands out clear and unmistakable. That fact is that if in the past 10 years each farmer had been able to get even a few dollars more than he did for each acre that he cultivated, there would have been no panie, there would have been no runs on the banks, there would have been no stoppage of factories, and been for the past decade. over 1,000,000 men would not now be vainly seeking employment.

One-half of our whole population is engaged in cultivating the soil, and the other half is making its living in some way or another out of those cultivators. Refine aud complicate the question as you will, that is it in a nutshell. An exceptional country like England may be in a measure independent of its farm-Whether the English farmers are prosperous or not, a large proportion of the people of England can still make money by selling goods, lending money, sailing ships, and performing other services for the people of the world outside of England.

But in the United States the factories can only make what our farmers want to buy; the merchants can only do business in buying from and selling to the farmers, and the railroads can only make money carrying what the farmers have to sell and what they buy in return.

Everything finally pivots on the farmer, and there is no man in the country, no matter what his wealth or his occupation, that is not directly affected by the farmer's financial position.

Take, for example, the wealthiest family in New York, the Astors. Their wealth is mainly in New York real estate, and would seem to be utterly indiminution of the gains of the farmers of the country, would at once make itself felt in the diminution of the rents

We are therefore justified in demanding that the farmers' interests shall be made as paramount in legislation and in the administration of the Government as they are in economic reality. While we believe that the farmer should help himself, and neglect nothing in industry, scientific knowledge, and progressive methods to make the most out his farm, yet we are equally strenuous in the belief that the Government should give him every assistance in its power. It should, whenever possible, protect him by tariff legislation against injurious competition from outside the country. If it is ever a question between the farmer and the manufacturer as to which should be protected, the farmer should have the first consideration.

We do not believe that a single agriultural product which can be raised on our own soil should be allowed to enter

We are to-day paying nearly \$200,-000,000 a year for foreign agricultural products which should be raised at ome, and that vast sum go into the ockets of our farmers. Were this the ase, there would be no complaint of a drain of our gold. The whole export of gold for the last three years has been less than that sum. Very much of this money goes to people who buy little or nothing from us.

If we had raised in South Carolina, Florida, Louisiana, and Texas all the rice that we bought abroad, in the South and West all the sugar that we purchased from Cuba and Brazil, in Sunny Dixie all the cotton that we imported ness of such operations and the necesfrom Egypt and India, and in our own sity of the Anti-Option Law. By no fields, orchards, and vineyards all the possibility could a single farmer have wool, raisins, oranges, lemons, tobacco, made any money by the success of that hemp, hay, potatoes, flax, hops, etc., that corner, and yet every farmer in the we brought across the sea, we should country lost money by it, and still con- piling up immense wealth by raising The remainder of the force of the office has have had tens of millions of dollars in tinues to do so.

With the tariff as a whole we have in that portion which relates directly to the farmers, and the maintenance and extension of which we believe is essential to the great work of making American farming profitable.

the utmost possible assistance to the tee. farmers by the diffusion of useful knowlsuccess in his calling.

This is our battlefield; here is where we have drawn our lines. We shall fight vigorously for everything that promises to promote the profits of farming, and against everything that threatens to further decrease them. We are inflexibly opposed to any and all reductions of duties on agricultural products until the farmers of the country are

fight against farmers' interests, and where National Capital, and every farmer in now be in hundreds of thousands of He can best keep up the fight for his gling farmers. This is a grave conseown interests by giving the paper a cordial support.

THE HAY TARIFF.

It is better late than never, and the farmers of Michigan and New York are at last waking up to the benefits of the duty on hay, and taking some action to duction of the amount of protection they have it retained.

The duty on hay is \$4 a ton, and New York dealers find that it is a profitable thing to take Canadian hay which has been shipped to them in bond for exportation to Europe out of the bonded warehouses and sell it in New York. Canadian hay delivered in New York ing of every representative of those averages \$12.50 a ton; adding \$4 duty, likely to be injured by such a measure makes the price \$16.50, which is so far was the least that should have been below the ruling price in the city as to pay the dealers a fair profit.

Canada has, it is estimated, 300,000 tons of surplus hay to dispose of somewhere, and if it were not for the tariff Eastern States, to the destruction of the markets which have been built up there for the products of the Michigan, New York, Pennsylvania, and Ohio meadows.

Previous to the imposition of the duty on hay no hay was sent from the interior of the country to the eastern seaboard, as all that was needed was supplied from Canada. The tariff opened this market to American farmers, and has given them a very fine revenue.

THOUGH the money market is much easier and daily becoming better, it is still tight enough to enable it to be easily manipulated by the money lords, and this accounts for the weak and uncertain produce markets for the past month. There should be a stiff advance in the prices of all manner of produce in the face of the universal shortage in this country and Europe, but this cannot take place in so long as the financial situation remains so precarious. But in spite of all efforts to the contrary the situation keeps on steadily improving. The banks are slowly losing their fears of runs, and are gradually loosing the tight grip they have kept on their currency. It is very costly to have their money lying idle. It means a disagreeable diminution of their dividends at the close of the year. Another month, we are positive, will see a general unlocking of hoards and great activity in all branches of business.

THE bad effects of the wild gambling ast Spring in Chicago in wheat still continue to manifest themselves. Part of the decline in wheat in Chicago last week was attributable to the crowding on to the market of heavy stocks by the Northwestern concerns which were crippled in the Cudahy corner. Nothing could show more conclusively the viciousTHE TARIFF REVISION:

The Ways and Means Committee of the House of Representatives closed its can people is that of making farming nothing to do. We are only interested hearings of those interested in tariff revision Sept. 20. Appearances favor the belief that the hearings might as well have never begun, for all the effect they will have upon the tariff reducers. The whole matter had a perfunctory, pro Further, we are firmly of the belief forma shape, that made the outlook hopethat the Government should develop its less for any change in the preconceived Department of Agriculture so as to give opinions of the majority of the commit-

> One of the amazing things done by edge, the testing of methods, the investi- the Chairman of the committee was to gation of soils, climatic conditions, dis- refuse a hearing to Hon. Wm. Lawrence, eases, pests, etc. The Department of the President of the American Wool-Agriculture should be extended until it Growers' Association. It is inexplicable is in thorough touch with everything that a man who represents over 1,000,000 affecting the farmer's success, and help- farmers, should have been denied a hearful in every possible way to his greatest ing to protest against the destruction of more than \$100,000,000 worth of their property, while men who represented infinitely inferior interests, like the importers of pearl buttons, were given all the time they desired.

> If there was any interest in the country that was entitled to the fullest and most patient hearing, it was that of wool-growing. It concerns the prosperity of more people than any other much more prosperous than they have affected by tariff legislation. Counting the families of the wool-growers, fully THE AMERICAN FARMER is here in one person in every 12 of our popu-Washington, in the storm-center of the lation has a direct personal and pecuniary interest in the protection of wool. To it can battle best for them. It is the reduce the prices of wool is most likely only champion that they have in the to destroy whatever profits there may the country should lose no time in en- farms, and give the final, bankrupting rolling himself among its subscribers. blow to an immense number of strugquence to face, but Chairman Wilson seems to have no compunctions.

No other interest of such magnitude is threatened with such a blow as is believed menaces wool-growing. The worst thought likely to happen other protected industries is a greater or less rehave been receiving, while the belief is that all the duties will be taken off wool, and our flock owners be forced into ruinous competition with foreigners. Before such a momentous step is taken, there should have been the fullest and gravest consideration. A patient hear-

In denying the right of any woolgrower-or representative of wool-growers-to be heard to the fullest extent, Chairman Wilson has done a very culpashe would find a market for it in the ble thing, for which the farmers of the

> It is noticeable that while the woolgrowers received such scant courtesy, the mine owners of Mr. Wilson's own State-West Virginia-had ample hearing, and all the opportunities they desired to demonstrate that no matter where else a reduction might and should be made, there should be no meddling with the duty on coal. The papers inform us that "the committee was much impressed with the force of the coal people's arguments." Naturally. The mine-owners and miners are a political power in West Virginia, and they are not at all loth to make politicians feel that power. Anything they say is, therefore, apt to be quite impressive.

The next thing is the preparation of a bill to be presented to the House, We are given to understand that the committee-or rather the majority of itare hard at work at this, and the result of their labors will be presented to the House at an early day.

Every effort is being made to keep the provisions of the bill a secret, but it is in the air that wool is to be made free, as a grand sop to the tariff reducers with relatively small reductions elsewhere. In plain words, the farmers are to be sacrificed to "tariff reform," and nobody else is to be hurt.

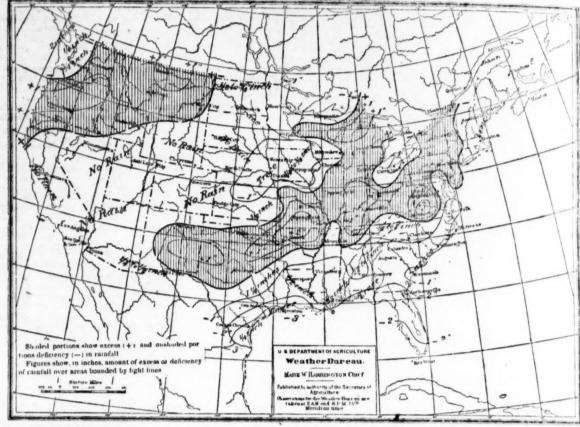
This is as we feared. Everybody but the wool-growers have made themselves felt and feared. The wool-growers, like their own lambs, have let themselves be led dumbly to the slaughter.

The next act will be played in the

THE last political campaign was fought against trusts, combines, and monopolies. Yet the first serious move is against the interests of the farmers. Where are the "bloated monopolists" who own sheep? Where is the "trust" that has raised the price of wool to the injury of the poor man? Where is the "dangerous combine" that is robbing the people and

U. S. DEPARTMENT OF ACRICULTURE WEATHER BUREAU.

Departures from Normal Rainfall for the two Weeks Ending Sept. 25, 1893.



The two weeks ending Sept. 25, 1893, were slightly cooler than usual in portions of New England, but in all other districts east of the Rocky Mountains, with the exception of the Upper Missouri Valley and Northern Rocky intain Slope, it was warmer than usual the temperature exceeding the normal by from 6° to 10° from the lower Missouri Valley southward to Texas, while from the Lake Region southward to the Gulf the daily exranged from 3° to 6°.

On the Pacific Coast and over the Central and Northern Plateau districts it was cooler than usual, the daily temperatures generally ranging from 3° to 8° below the normal

Freezing temperatures occurred in North Dakota on the 19th, Wyoming on the 22d, and generally throughout the Dakotas, Montana, Wyoming, western Nebraska, and northern Minnesota on the 23d and 25th, the lowest temperature reported being 14° below the freezing point at Huron, S. Dak., on the

Frost warnings were issued by the Weather Bureau for the States of the Ohio Valley western Tennessee, Missouri, Arkansas, Okla homa, and Kansas on the morning of the 25th, and for the Atlantic Coast States as far South as the western Carolinas on the 26th

The rainfall during the period above named, was excessive in the Ohio, central Mississippi, and lower Missouri Valleys, upper Lake Region, northern Texas, Indian Territory, and New Mexico. It was also excessive over portions of New York, New Jersey, and Pennsylvania, and on the North Pacific Coast, except in western Washington. The heaviest rainfalls occurred in southern Virginia, southern Misouri, and northwestern Arkansas, where from three and a balf to four and a half inches of actual rainfall occurred. Actual rainfalls of from two to three and a half inches were also reported from eastern New Mexico, northern exas, and in the central Mississippi, lower

Missouri, and Ohio Valleys.

Marked deficiencies in the rainfall for this period exist in the Gulf and South Atlantic than the usual amount of rain has fallen. generally along the coast, the actual rainfall numerous stations no measurable quantities Missouri Valley and in ortions of the upper Mississippi Valley, and there was a total absence of rain over a strip of country extending from Nebraska and South Dakota southwestward to the Pacific

Cotton is opening rapidly and picking has continued under generally favorable conditions, although picking was somewhat checked in Texas and Oklahoma by rains during the latter part of the week. The crop is reported much improved in Alabama, but the cool weather has had unfavorable effect in Mississippi, and some injury has resulted from excessive rains in Oklahoma, and from dirt on the opening bolls in Tennessee. The recent rains in Texas have improved prospects "top crop" of cotton where the plant is Pasturage has continued in good condition

in New England and the Middle Atlantic States, and has greatly improved in the Ohio Corn cutting, where not completed, is being

rapidly pushed, and the crop is now regarded as practically secured. Tobacco cutting is also being rapidly pushed in Maryland, Virginia, Tennessee, and Kentucky. In Pennsylvania much tobacco remains still in the field.

THE impression that British cloths

are as a rule superior to those made in

this country is largely due to the fact

that the tariff duties have kept out the

shoddy class of British goods. There

are five pounds of shoddy made and

worn in Great Britain to one in this

country, and if we are to have free trade

we shall see this country deluged with

cheap shoddies of the worst character,

which will complete the ruin of Ameri-

can wool growing as well as manufact-

PERSONAL.

Thomas L. Martin, Secretary of the Lex-

Mrs. Jennie Atchley, one of THE AMERI-

CAN FARMER's most valued contributors,

writes us: "I have now two carloads of bees

ready to move to Beeville, Bee Co., Tex., my

inture home. I will send you some interest

Ree Co., would seem to be just the right place

for such a Queen Bee of industry as Sister

Mr. A. C. True, of Connecticut, for several

years past employed in the Office of Experi-ment Stations in the Department of Agricult-

are, and for the last two years as Assistant

Director, has been promoted by Secretary Morton to be Director of the office, to succeed

Mr. A. W. Harris, who recently resigned to

accept the Presidency of the Maine State College. The salary of Director of the Office of Experiment Stations is \$2,500 per annum.

been so arranged as to avoid the ne

any further appointments.

ing articles when I get moved."

Atchley to live.

ington (Ky.) Fair Association, has been ap-pointed a member of the Advisory Council of

The week has been generally favorable for ! Fall plowing and seeding, and this work, which has been much retarded by previous drouth conditions, is being rapidly caught up and has been completed in some sections. In Nebraska, however, the drouth remains unbroken, and Fall plowing and seeding has been suspended. beneficial rains have fallen, the ground is still too dry for seeding.

SPECIAL TELEGRAPHIC REPORTS. New England.—Temperature below normal, except on Massachusetts coast; precipitation below average in all sections; sunshine normal; ground in fine condition for Fail plowing; more rain needed to fill the springs before the ground frances.

eezes.
New York. — Weather generally favorable though rather cool; rainfall sufficient; Fall work well up; potatoes rotting extensively in north portion; grapes unusually abundant and good; apple picking begun, light crop.

Act Jersey.—The weather conditions of the week have been most favorable for the cutting of corn, plowing, and gathering of fruits; the light rains were very beneficial to Winter grain and grass, which are coming up well and growing fast.

Pennsylvania. — Weather entirely favorable

ing fast.

Pennsylvania. — Weather entirely favorable and great progress made in seeding and corn cutting; much tobacco still in field; buckwheat harvest over, poorest crop raised this season; few potatoes, but of fine quality.

Maryland.—Good weather for plowing, corn cutting, and wheat seeding; fodder and tobacco saving now in progress; matures and late to.

saving now in progress; pastures and late to-bacco greatly improved; peaches and apples ex-cellent in western sections; large quantities of tomatoes being picked in eastern portion. Virginia.—Sunshine above normal and rain-fall below; weather conditions have been very fall below; weather conditions have been very favorable except in extreme southwestern portion, where dry weather retarded wheat seeding; tobacco cutting has progressed rapidly. North Carolina.—Temperature and sunshine above and precipitation below normal; very favorable conditions; farmers busy picking cotton, gathering peas, curing hay and fodder, seeding oats, preparing land for wheat, harvesting rice digging senuts, etc.

seeding oats, preparing land for wheat, harvesting rice, digging peanuts, etc.
South Carolina.—Cotton opening rapidly and
picking progressing withfull force, crop will be
very short; largest crop of best pea vine, hay,
and crab grass ever gathered; potatoes good.
Georgia—Week almost without rain; days
very warm; cotton opening so rapidly that
picking hardly keeps up with it, crop half
gathered in south portion; rain needed for cane
and potatoes; no Fall grain sown, as it is too
dry.

dry.
Florida. – No rain except inappreciable showers; temperature decidedly excessive in northern portion; splendid weather for making but her ng corn, and picking cotton, but un-

able for truck farming and gardens.

bama.—Under very lavorable weather of treek cotton has improved much, it is openapidly and picking is general; peas, pos, cane, and corn are doing well, but will rain soon; late gardens in good condition; crature and sunshine above normal.

sksippi.—Warm, sunshiny, and dry, except rains in porthery nortion; week closes.

Mondand.—Temperature slightly below normal; rains in porthery nortion; week closes. saved; potatoes, peas, turnips, and Fall gardens will improve with moisture, but present cool,

Cotton picking progressing favor Louisiana.—Cotton picking progressing Iavor aby and will be practically completed by Nov I, crop about two-thirds open, and will be short rice cutting, corn and hay harvesting, orang picking, and Fall planting of cane continue cane prospects excellent, some will be ripe in the control of th

cane prospects excenent, some will be ripe in October; week warm, dry, and sunshiny. Teras.—Cotton picking progressed rapidly with favorable weather until Monday, when rain checked work; rains have improved grass and put ground in condition for Fall plowing in northwest portion of State, and have improved

Arkansas.—High temperature, abundant sunno, and absence of precipitation in early part week further aggravated effects of drouth; dition of cotton has fallen slightly, it is ning rapidly and picking is general; late is very beneficial to vegetables and will ening rapidly and picking is general; late his very beneficial to vegetables and will rmit plowing and seeding. Tennessee.—Weather has been favorable for

owing and saving tobacco and fodder; tobacco northeast portion is being out and is curing calities; some Winter outs being sown; cotton jured by dirt on open bolls. Kentucky.—Temperature excessive; general ins about normal; corn and tobacco cutting and fallowing progressing; general improve-uent in crops.

Missouri - Excessive

West Virginia.—Rainfall and temp West Virginia.—Rainfall and temper above average; corn cutting in full ripened unevenly in many localities; sown and wheat needing rain; stock doing grapes reported full crop.

Ohio.—Rains have improved condition pastures, advanced seeding and plowing given early-sown wheat a start; corn cinearly completed; buckwheat a poor millet in good condition; clover thrashing pleted.

Michigan.—Temperature above normale in northern Counties; rainfall above nexcept in southern Counties; sanshine

in northern Counties; rainfall a except in southern Counties; s cient; pastures and late crops im cent rains in central and northern seground in shape for plowing except in se acreage small; buckwheat cut, light of ing temperature, but nearly everythic cranberries about half-crop; tobacco

rains.

Iowa.—Temperature above in southers and rainfall below average except in ca and southern portions; all crops safe. North Dakota.—Abnormally cold, with winds all week, hindering farm work: plowing greatly delayed for want of ra

killing frosts were general on the night of 24th, doing little or no damage, corn being beyond danger. Kansas.—Sunshine average: hot first half of

Oregon.—Hop picking near com good results; seeding grain begun in tions, ground in excellent conditional slightly damaged by late rains; particularly damaged by late rains and late of the lat California.—Abnormally cool wer

ing continues.

ARE YOU COING TO THE FAIR? If So, Get Your Ticket by the Picturesque Chesapeake & Ohio Railroad. The Chesapeake & Ohio Railroad has at-

ractions for a World's Fair visitor that are to be found on no other. First, it runs through a region in which more American history was made than anywhere else in the country One branch starts from the National Capital and traverses the region which for four long years was the manuvering and battle ground of the Armies of the Potoniac and Northern The other branch starts from irginia. Thesapeake Bay and the mouth of the historic James River, and runs along the valley of that stream through Richmond and other the Persian Gulf by Caravan. points of intense interest in by-gone days to Charlottesville, the seat of the University of Virginia, and near Monticello, once the home of Thomas Jefferson. There the two branches unite, and the road crosses the Blue Ridge to Staunton, the capital of the beautiful and Shenandoah Valley. Thence it ascends the Alleganies, on the summit of which are the White Sulphur Springs, "the Saratoga of the South," and after passthe World's Congress Auxiliary on Farm Culture and Cereal Industry. He was also appointed a member of the World's Agricult-ural Congress, which will convene Oct. 16. ing that point begins the descent through the wonderfully picturesque Greenbrier, New and Kanawha River Valleys to the distant Ohio, and runs along the banks of that noble stream through beautiful Kentucky and Ohio scenery "Queen city of the West." From there the traveler crosses the fertile valleys of the great Miami, Wabash, and Kankakee Rivers, and the great prairies of Indiana, passing through Indianpolis to Chicago.

It is a trip that is an education in history and geography, as well as a delight to the lover of beautiful scenery. He gets ever variety from the pine and poplar covered hills of "Tidewater Virginia," the higher eminences of "Piedmont Virginia," the ever hills of changing hights and rocky canyons of the Alleganies to the boundless cornfields of Ohio and Indiana.

is of the highest character; splendid road bed, the finest cars, and rapid time.

The road is now running a series of cheap to Chicago at only \$17 for the

nal, and tells what came of the

mind, at the present time, of the

amous story and the condition

Frank Leslie's Popular Magazi er has 128 large pages, fille eading matter, and embellished ngravings. Published at 110 1 New York. Price. 25 cents. Frank R. Stockton has writte of "How I Wrote 'The Lady, or for the next issue of The Lad

tion of the problem whether the tiger came out of the opened doo The October Harper's Magaz the first part of Mr. Edwin Lord dertook last year with the lat Child. The first paper parrates ences on the road through the Kurds, between Trebizond and lescribes the latter city as it app

a cholera scourge. The article ng the journey. Harper's Weekly follows up its n of portraits of "Enemies of the fare" with an equally striking week of the "Friends of Rep World's Fair illustrations are cially timely interest, including British Day celebration and Zog acteristic sketches among the Cadets. The shooting season is at opened by A. B. Frost with

double-page drawing, entitled Shooting;" while Prof. Darmst entertainingly of Calcutta in the on the "Capitals of the World. *Maryland: Its Resources, Inc Agricultural Condition, 1893, the publishers of the Baltimore bian Exposition, Sept. 12, the anni of the National hymn of the Banner," markable progress in the developm

varied resources in recent years, and exceptional attractions to settlers desir ocate where they will have the oppo to better their condition. A copy will be free upon application to the Sun, Baltimore, Md.

WHY WE PLOW.

The Great Advantages Arising Out of Frequent Stirrings of the Soil.

EDITOR AMERICAN FARMER: There has been a great deal said, and well said at that, in the agricultural press about plowing, and "plowing matches" have been the order of one of the most important of the operations of the farm. We have a special admiration for a straight, smooth, completely-inverted furrow-one that is even in width and even in depth, where all trash is completely cov-But although it is highly important to know just exactly how to plow, it is of vastly greater importance that every soil tiller acquaint himself thoroughly with the reasons why he plows. What does he expect to ac complish thereby? Various reasons might be given of why we plow, but we propose to con fine ourselves in this short article to a few of the most important of these reasons. First, to bury a surface growth of sod under the soil whereby its decay will add its elements to the general stock of plant food already in the soil. Second, to kill weeds, thereby obtaining a clean surface, so that crops may enjoy undisputed and sole possession of the soil. Third, the thorough pulverization of the soil so as to make a perfect seed bed for the young and growing plants—right here the harrow and roller come in. Fourth, to break the crust after each rain so that the land shall imbibe its full share of heat, air, and moisture.

By the time this goes to press it is probable that all the readers of THE AMERICAN FARMER will have their ground as thoroughly prepared as practicable and the bulk of their planted. Then is the time it becomes doubly necessary to know how to plow, when to plow, and why it is necessary to plow at all. In whatever manner the ground may have been prepared for the crop, whether by plowing deep or shallow, surface cultivation oft repeated should be the order of the day for any and all crops that have to be plowed and hoed. This surface cultivation not only kills all grass and weeds, but breaking the crusts after each rain opens up the the air, allowing it to enter, to be absorbed by the soil and to pass out from the soil freely. This loose surface soil is, in short, the lungs that enable both the soil and the lateral or feeding roots to breathe.

This breathing process is not only of prime necessity to the healthfulness of the growing plant, but it is also essential to that important process termed "nitrification," by which organic nitrogen in the soil is changed into nitrates-the form in which nitrogen is appropriated by plants almost exclusively. Nitrification requires a pretty high temperature, but in soils that contain a liberal supply of humus, and are stirred frequently with the plow, cultivator, or harrow, will go on rapidly in such weather as we usually have after,

There is a large quantity of land scattered about over this broad land that is so close in texture, so tenacious and air excluding as to be almost barren; yet these same semi-barren soils contain in their natural state exhaustless stores of plant food, oftentimes proving to be the strongest soils we have. This state of semi-barrenness is sometimes due to too much water, but still oftener to a lack of æration of the soil, or to make the matter as plain as possible, a lack of lungs to breathe with. This breathing process can be brought about by drainage where the soil is too wet, by deep plowing on all soils that will stand deep plowing, and thorough plowing with subsoil plowing on any and all soils.

I have in numerous instances and in various portions of the United States seen land seriously and permanently injured by what is commonly termed "deep" plowing; i. e., turning up the cold subsoil to the surface. But in no single instance have I seen "sub-soiling" a disadvantage, let the soil be ever so thin and shallow. Thorough cultivation unlocks the stores of plant food the soil contains. Where ground is lumpy or cloddy it is in too coarse a form to be utilized by the roots of plants. No matter how rich in actual plant food these coarse particles may be, they must be thoroughly pulverized by frequent and thorough cultivation before they the soil the greater the quantity of plant food that is made available and the mo-and luxuriant will be their growth. and the more rapid

One fact should always be borne in mind: That is, that plants do not eat, they drink; consequently no matter how voracious a feeder they may be they cannot eat a clod nor appropriate to their uses in any manner. A clod is dead property, worthless, unprofitable,

good for nothing.

We come now to what we believe to be the most important reason for frequent shallow cultivation, viz., conservation of soil moisture. To conserve the moisture that is deposited in earth by rains, and even by dews, necessitates deep preparation of the soil previous to that the rains may be readily ab-When absorbed it must not be alsorbed. by evaporation; but if the full benefit of the Winter and Spring rains are to e utilized and realized, the moisture must mediate reach of the evaporating influences of

the sun. Stored deep in the earth, a perpetual reservoir, it is ready to be brought to the surface for the use of growing plants when needed by the capillary action of the earth. In order to make this matter as plain as possible to the ordinary reader, we would say that after every rain the soil is settled down, the particles of earth are packed nearer together, and the spaces between them are small. A number these small spaces joined together make little tubes, called "capillary" tubes, and in these water will rise from below. If the soil It was has not been disturbed after a rain, these tubes came to the surface, and so does the water in them. The water coming to the surface evaporates and escapes; consequently is lost as

far as that particular crop is concerned. When the soil has been plowed, the spaces or tubes are made larger, and water will not rise in large tubes. Hence it comes up as far as the small tubes are undisturbed and stops there, and the loose soil above prevents its rapid evaporation. In this way and by these natural pores of the earth are closed, the loose dirt serves as a and the soil moisture conserved in time of crouth and retained in the soil (exactly where it is needed) from one rain to the next. This mulch not only prevents the escape of soil moisture, but it also tends to check the intense heat of the sun in its downward progress to the roots of plants. Both of these are very important matters during spells of hot, dry weather .- G. H. TURNER, Lafavette

Rye for Germany.

Frank H. Mason, United States Consul-General at Frankfort, Germany, writes to the State Department that there is likely to be a demand from Germany upon this country for rye, in consequence of the tariff war with Russia, which has shut off the supply from country. Heretofore Germany has bought about \$21,420,000 worth of rye from Russia a year, and that country is the only one from which it is obtainable in large quantities. The present tariff war must continue until it is too late to get any grain from Russia, owing to the freezing up of the rivers.

The only country to which Germany can look for this cereal is the United States. We have had a good trade with her for years, and last had a good trade with her for years, and last year we sent there 3,965,191 bushels of rye, besides 13,901,239 bushels of corn and 7,635,much corn will be taken to help make up the have not warranted the owners in making any

HEALTHFUL OREGON.

The Culture of Prunes the Coming Industry of the State.

EDITOR AMERICAN FARMER: This is one finest spots that it has ever been my good fortune to be placed in; the climate is near enough perfection to suit the average mortal. We have no cyclones, no blizzards, no "storm holes" to run for in the darkness of the night, and when one lies down to rest it is with a sense of security that I feel sure ome of your readers do not feel every night. The rainfall in this part of the State is not excessive, and the soil is of that texture that our the day. This is as it should be, plowing being roads are first-class in the Winter, for almost as large loads can be hauled over them in Winter as in Summer. The mean tempe for the past 16 years for the month of June has been 61°, and in Winter the thermometer rarely falls below freezing. One of the best evidences of the salubriousness of our climate is the fact that in this village is an orange ree 10 years old that has been raised out of ors with but little if any protection during eat time. Palm trees and other semi-tropical lants grow here and do well without the slightest protection. Sweet potatoes and pea-nuts are raised in various places near here.

This little village is situated about 230 niles south of Portland, on the Southern Paific Railroad, 637 feet above the sea and about 50 miles from the Coast, kins giving us the benefit of the sea breeze that tempers the cold of Winter and modifies the heat of Summer, giving us one of the most pleasant climates to ive in imaginable. The general topography if this country is rough and uneven; in fact, ather rugged in places, but is well wooded This country is particularly adapted to fruit

ising and stock farming, as the area of farming land is not extremely large, although all kinds of cereals produce abundantly where given even the ghost of a show. No irrigation is necessary here to produce any kind of crop. There is wheat here that stands over six feet high, having heads over six inches long. Our principal fruit is prunes, and this industry will soon take the lead of all others, as our prunes are far superior to the California. roduct: so much so in fact, that unscrupulous California buyers have been in the habit of buying up the Oregon prunes and selling them as the best California product. A few dealers your honorable servant what it is to live in in Chicago have gotten hold of some of our prunes and they found them so far superior to the California article that they want all they can get of them. The prune does not yield a paying crop until five years old, but

Then we knew but few and cared less; from then on the profits gradually increase until at 10 years old they will yield an in-

come of from \$800 to \$1,000 per acre.

Prune land can be had for from \$50 to \$100 per acre for best locations. It will cost \$10 offer. We read but one paper, and that was per acre to buy the trees, and from \$9 to \$12 usually a political organ of our party, which first two years that will more than pay for cultivation. Cattle and horses are very ow here now. Sheep are worth about \$2 per lead; eggs, 20 cents; chickens, \$3 to \$5 per ozen. This is a fine country for poultry ng, and at present there is a fine opening in that line here for someone. I see no reason why bees should not be a profitable in-dustry if handled properly, as alfalfa can be grown here on a great deal of the bottom land, and it furnishes the very best of food for bees. Harvesting is about over in this section. The yield has been good, wheat yielding as much as 42 bushels to the acre. Our warmest weather this Summer was 95°, and that one day only. The fruit crop is going to be good all around; the apple crop better than usual. The prune crop will be heavy; trees are now breaking down in nearly all the orchards. Seven and a half cents have been bid on the times prove. rop by a St. Louis house. Figs are also getting ripe. A large acreage of fruit will be planted this Fall. About 20 carloads of dried prunes will be shipped from here this season.
Drying will commence in about three weeks.
Flour is selling for \$3.60 per barrel, and

Creek, Ore. The Season in Southern Indiana.

wheat about 50 cents per bushel. Stock of all kinds cheap. — W. T. Fogle, Myrtle

EDITOR AMERICAN FARMER: Perhans w lines from Southern Indiana may be of pterest to some of the readers of your valu-We have had a very dry season. ble paper I never saw the water courses as near dry in my life as they are at the present, and yet I can be made available as plant food. The more than we have this year. We have a very fair frequent and thorough the pulverization of the soil the greater the greater the soil the greater the greater than the soil than have seen dry seasons when we had less corn crop, plenty for home use, which can be bought for 50 cents per bushel. Wheat, 55 for Friday afternoon, 4 o'clock, and Friday cents per bushel: potatoes, \$1: hav. \$7 to \$12 per ton. There is no wheat sown yet, as the ground is too hard to break. Farmers are preparing to sow in corn. There is some breaking done where there was clover sown, and broke last season and sown to wheat. It breaks very well. Farmers are Farmers are thrushing their clover seed. It yields from two and a half to five and a half bushels per acre, and is worth 80 cents per pound. Thes same lands have given from one to two tons of hay per acre from first cutting, and now ern readers, yet it is a fact, that these same lands can be bought for from \$20 to \$30 per acre with good buildings on them. There is some land that can be bought as low as \$12 per acre. Fruit is very scarce, except peaches, and quinces. - WM. A. GRAHAM, Bigger, Ind.

AN IRRIGATION CONGRESS.

An Interstate Convention for the Reclamation of Millions of Acres of Land.

The Interstate Irrigation Convention, which met Sept. 28, at Salina, Kan., was a very important event in connection with the agitation of the question of reclaiming the 200,000,000 country. There were delegates from the Dakotas, Kansas, Colorado, Wyoming, Oklahoma, and

It was estimated that the territory embrace in this arid district is sufficient to make half a dozen good States. The climate of the greater portion of it is the finest and most healthful. The soil is mostly of the plains marl formation, which is the richest wash from the mountains, and in some places 50 feet deep. It was believed that while Congress is spending such vast sums of public money on rivers and harbors, a small amount should be devoted to the solution of this important problem. Public domain of a desirable quality and condition is becoming alarmingly scarce in this country, and in a few years the home-seekers will have to go to some other country or remain landless. Two hundred million acres will go a great way in the direction of assisting Uncle Sam in giving all

In Colorado, where the surface flow of streams is not sufficient to keep the ditches filled the year round, large storage reservoirs have been built which supplement the surface flow and furnishes water in sufficient quantity. Some of these artificial lakes cover several hundred acres of ground and are supplied from the storm water and drainage from the mountains of melting snows. But they are

very expensive.
In portions of Kansas, distant from any stream, farmers have been sinking large wells. erecting good, strong windmills, providing good storage tanks, and in this manner irrigating a large garden and fruit orchard, thus securing a certain supply for the family in event of a total failure of all field crops. In a few instances this plan has been made to serve a few small fields where crops were grown, thereby securing a good half which would otherwise have been a total failure. Some Kansas farmers have built, on a limited scale, the storage reservoirs, by dam-ming some of the draws running across their But these were not of sufficient size 12:6 bushels of wheat. It is probable that to afford more than a good fish pond, and extensive service ditches.

the Country.

our brother and sister Patrons, we combined.

Wake up, farmers, and join the Grange. These are grand opportunities. Do not let them go by. Life is altogether too short to be lost in asking, "well, What has the Grange done, anyhow?" Where is the Granger that her not been done. has not heard this scores of times? Who is the anti-Granger who does not know to a certainty that the Grange has done all and even more than we shall claim for it? For nearly one-quarter of a century the National Grange has existed, met annually and discussed various subjects of importance to the agricultural masses, and who can say that these gatherings have not been productive of great

Brother farmers, we need your co-operation; we believe we are entitled to it. After 24 years of struggle as an Order certainly we have accomplished something worthy of your approval. Did it ever occur that under obligation to society, and that it is wrong in principle to absent yourself from meetings and then find fault because the Grange has not accomplished all you think it ald? No, we do not feel disposed to find gnorance of what there is in store for us. When we compare our life of 10 years ago,

voted with the majority and thought we had done it; made no study of politics, finance, temperance, tariff, or any kind of reform, and would have sold out cheap had we had an usually a political organ of our party, which annually to cultivate and prune the trees, but corn or beans can be raised on the land the our own interest if we would vote for Mr. A, B, or C, as the party bosses might suggest It's no wonder we were called cattle by shrewd politicians. They saw us coming off our perch, and they called us other hard names, and said we'd fizzle out in a short time,

Granger of to-day is a live thinker also, and does not get pulled into all the alluring schemes to make money, like the Bohemian Oat Swindle and many others. The unsus-picious anti-Granger must be the victim. We talk these matters over in our meetings, read them in our papers, and they are fresh in our mind, and when a smart Aleck comes around showing up his goods we are up to his tricks. The average Patron of to-day is a reader of all kinds of agricultural literature, can talk with you intelligently on almost any subject. and can tell even more than he can some

Now, brother farmers and laborers, if our own experience inspires your thoughts in the direction of co-operation among your fellow men, we shall feel well paid for what little effort we have made. - T. G. ADAMS, Shelbyville.

PRIESTS OF DEMETER.

OFFICE OF THE ANNALIST,

514 F STREET, WASHINGTON, D. C., Sept. 18, 1893. The Assembly of the Priests of Demeter of the Order of The Patrons of Husbandry will confer the Seventh Degree, or Degree of Ceres, during the 27th session of the National Grange, to be convened at Syracuse, N. Y., on Wedevening at 8 o'clock, Nov. 17. The ceremonie of conferring the degree will take place in the Alhambra Hall.

Members who have received the Sixth De gree, or Degree of Flora, are entitled to this egree, upon the payment of \$1, accompanied with a certificate, bearing name of applicant, residence, town, County, and State, and place of having received the Sixth Degree. Where man and wife prefer the certificate in one, it will be so issued by the Assembly, but the fees for the degree will be the same as though the certificates were issued separately. Parties desiring one certificate, as above, must notify the Annalist before the meeting

of the Assembly.

All applications must be approved by the All applications must be approved by the Worthy Master of the State Grange, in whose jurisdiction the applicant resides.

Applications prior to Nov. 10 should be sent to H. H. Goff, Spencerport, N. Y., who will supply the proper blank forms of appli-cation. Subsequent to Nov. 10, applications cation. Subsequent to Nov. 10, applications should be sent to the same brother (H. H. Goff), but addressed, Vanderbilt Hotel, Syracuse, N. Y., where personal applications can also be made previous to and during the session until the time of conferring the degree.

Fraternally LEONARD RHONE, High Priest.

Transfers of Purebred Stock, American Southdown Record.

Alexander "571" \5368-A. J. Alexander, Spring Station, Ky., to W. D. Irvine, Dan-

Smithfield, Pa., to E. W. Hill, Shunk, Pa. Granville 5450—M. D. Hartshorn & Bro.

Ohio Dan 5451-M. D. Hartshorn & Bro.,

Palmerston IV. 5128—J. R. Harvey to John

ville, O., to W. E. Spicer, Harvard, Neb. Warren Ewe "805" 5588 and Warren Ewe "769" 5586 - John Hobart Warren, Hoosick Falls, N. Y., to John J. Glessner, Littleton, N. H.



Dyspensia. I tried almost every medicine and almost gave up hope of ever being any better. But Hood's Sarsaparilla gave me relief very soon and now I am entirely cured of dyspepsia, and

Mrs. J. Fenton. advise every one to try Hood's Sars parilla." Mrs. John Finton, 67 Pride St., Pittsburg, Pa. Get only Hood's

Hood's Parilla Cures

How it is Beneficial to the Farmers of

EDITOR AMERICAN FARMER: When we look back to the days before we joined the Grange and compare them with the many pleasant meetings that we have enjoyed with most assuredly that the Grange has been a blessing to not only the farmers, but to all la-borers. Go back with me, say, 20 years ago and look at the average farmer of that day and compare him with the intelligent Granger farmer of to-day. What was he? Simply a working machine in abject slavery. To whom? To himself and family, seldom if ever having any interest in the welfare of anyone outside of his own immediate family. It's no wonder, sir, we were called hay seedy fellows. But alas, how different with the Granger of to-day. We have in our ranks some of the noblest men and women of the land who have been converted to the prin-ciples of this grand Order which has done more to educate and elevate the laboring classes than all other similar organizations

good?

They were disappointed. Now, the

Assembly at Syracuse, N. Y., Nov. 15.

JOHN TRIMBLE, Annalist.

ville, Ky.
Wood "45" 5382—Mrs. W. A. Wood, East

Newark, O., to H. D. McLaughlin, Granville.

to J. W. McCary, Granville, O. Warren "28C" 4893—John Hobart Waren, Hoosick Falls, N. Y., to Cornelius Van-

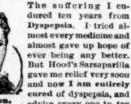
derbilt, Newport, R. I.

Lady Roseberry IX. 5166, Lady Stanford
XV. 5168, and Lady Webb XI. 5170—J. R.

Harvey, Turlington, Neb., to H. E. Cary,

row has a continuous feast while the seed is ripening, and where this rich food occurs in the neighborhood of populous cities, as near Philadelphia, Baltimore, and Washington, shwell, Little River, Kan. Gladstone IV. 5710—W. U. Noble, Brecks the sparrows resort to it in swarms, and after a few days of feasting might be mistaken readily for rice birds. Indeed, thousands of

No Pen Can Describe



Hood's Pills act easily, yet premptly.

THE CRANCE.

THE PROPERTY OF THE PROPERTY O OBACCO AND SMOKE YOUR LIFE

IS THE TRUTHFUL, STARTLING TITLE OF A LITTLE BOOK THAT TELLS ALL ABOUT NO-TO-BA

The ONLY GUARANTEED, HARMLESS, ECONOMICAL CURE for the Tobacco Habit in the world; not for the BEASON it makes Tobacco TASTE BAD, but because it ACTS DIRECTLY ON THE NERVE CENTERS, DESTROYING THE NEBVE-CRAVING DESIGE, preparing the way for DISCONTINUANCE WITHOUT INCONVENIENCE. NO-TO-EAC Stimulaters, builds up and improves the entire nervous system. Many report a gain of TEN POUNDS in as many days. Get book at your drug stere or write for it—to-day. DRUCGISTS CENERALLY SELL NO-TO-BAC. It you are a tobacco user take time to read the following TRUTHFUL TESTIMONIALS, a few of many thousands from No-To-Bac users, printed to show how No-To-Bac works. THEY ARE THE TRUTH, PURE AND SIMPLE. We know this, and back them by a reward of \$5,600.00 to anyone who can prove the testimonials false, and that we have knowingly printed testimonials that do not, so far as we know, represent the honest opinion of the writers. You don't have to buy No-To-Bac on testimonial endorsement. No-To-BaC is positively guaranteed to cure or money refunded. We give good agents exclusive territory and liberal terms. Many agents make \$10 a day.

TOBACCO HABIT CURE

COMPANDACIONE DE CONTRACTOR DE

CURED THREE YEARS AGO-USED LESS THAN A BOX OF NO-TO-BAC.

Mr. CARMEL, ILL., Oct. 10. 1822.—Gentlemen: I purchased one box of our No-To-Bac three years ago. Took about three-quarters of the box, hich completely destroyed my appetite for tobacco. I had used tobac-since 9 years of age. I had tried to quit of my own accord and found impossible, but now I am completely cured and do not have the least awing for tobacco. I hope others will use your treatment.

ROLLO G. BLOOD.

USED EVERY SUBSTITUTE AND ANTIDOTE, BUT WITHOUT SUC-CESS - NO-TO-BAC MAKES A COMPLETE CURE, AND HE GAINS TWENTY-FIVE POUNDS.

W. E. PEAY.

PUBLISHERS:

do as they agree.

and Dale Ewe

Alexandria, O.

Hash, Ky.

Shelborne, Vt.

Ontario, Canada.

Wadsworth, N. Y.

ada.

Tenn.

Omaha, Neb.

appetizing.

Wadsworth N V

GUARANTEE.

dale, Ontario, Canada, to F. W. Barrett,

Abingdon, Ontario, Canada, to S. A. Metler,

5632—John Jackson & Sons, Abingdon, On-

Duchess 5518 and Fannie 5519-L. C. An-

lerson, Anderson, O., to J. A. Showman,

Nutwood 5511 and Noble Ewe "171

515-W. U. Noble, Brecksville, O., to R. H.

Fitzgerald, Shiner, Tex.
King George I. 5861 and King William I

5483—Arthur Simenton & Sons, Blackheath, Ontario, Canada, to Geo. McKerrow, Sussex,

Dale Ewe "14" 5033 and Patrick 5025-

Geo. McKerrow to D. E. Lawell, Rabbit

Warren "833" 4892—John Hobart Warren,

Warren "60E" 4281—John Hobart Warren

Warren "51E" 4891-John Hobart Warren

Champion Sailor 5417-Gid Witte, West

salem, Ill., to Wm. Corson, Albion, Ill. Clay "338" 3903—John H. Aylor, Gun-

powder, Ky., to H. B. Smith, Delaware,

John Stanford 5219-Wm, H. Plass, Hills-

Telfer "26" 5718-A. Telfer & Sons, Paris,

King William I. 5483-Peter Metler, North

Royal Colman Ewe "2A" 2943 and Jonas Ewe "20" 2041—John Jackson & Sons,

Abingdon, Ontario, Canada, to Windle John-

Dale Ewe "20" 5853, Dale Ewe "38" 857 and Dale "18" 5969—D. H. Dale, Glen-

Pride 5970-D. H. Dale to F. W. Barrett,

Punch 5372-Robert Shaw & Sons, Han-

ford Station, Ontario, Canada, to Gay Carr,

Compton Station, Province of Quebec.
Tennessee Champion 6030—S. E. Prather,
Springfield. Ill., to T. P. Green, Shelbyville,

rincess Beatrice XII. 5140, Morley XIII.

5127, and Princess Louise XIII. 2805—J. R. Harvey, Turlington, Neb., to A. E. Cary

Lawrence 6021-Sam'l Clark, Lawrence

Ill., to Sam'l J. Sharpless, Philadelphia, Pa.
—S. E. PRATHER, Secretary, Springfield,

The English Sparrow.

Prof. Hill, of the Agricultural Department,

as been giving considerable attention to the

English sparrow, and suggests a manuer of

to be generally known that the English spar-

real delicacy. Such, however, is the fact, and the bird is growing in favor daily with those who have overcome their prejudices sufficiently to make a fair trial. Throughout Europe the sparrow always has been held in

Britain sparrow pie has come to be regarded as fairly typical of all that is savory and

Even under ordinary circumstances the

flesh is well flavored and tender, though

rarely fat, and when in early Autumn the

sparrow congregates on stubblefields or ripen-ing grain their flesh becomes more juicy and

time of leaving the nest are about two-thirds

as heavy as their parents, and if properly

prepared form the most tempting morsels im-

Except during heavy snows sparrows sel-dom lack for food, and in many places the

supply is superaliundant. Wherever the so-called wild rice flourishes the English spar-

insuspecting customers as rice birds or "or-

or bobolink, the sparrow does not take on fat readily, even when food is superabundant. Probably its restlessness and intense activity

have something to do with it, but whatever the cause the fact is attested. Foreigners familiar with sparrows from childhood have learned that their flavor and condition can be

improved very materially by keeping them

become general among those intereste sale of the bird as an article of food.

on a richer flavor. The young at the

esteem as a table bird, and in Great

liminishing its numbers.

row is a superior article of food;

lale, Ontario, Canada, to A. Telfer & Sons.

son, Roseden, Ontario, Canada.

Ontario, Canada, to Wm. Stonhous, Wyoming

Pelham, Ontario Canada to Arthur Simen-

ton & Sons, North Pelham, Ontario, Can-

boro, Mo., to J. E. Miller, Hillsboro, Mo.

Hoosick Falls, N. Y., to W. Seward Webb,

John A. 5024-Geo. McKerrow,

Wis., to J. J. O'Conner, St. Louis, Mo.

H. G. Russell, Greenwich, R. I.

to G. K. Boutellee, Waterville, Me.

tario, Canada, to Lester J. Bashford, Hollow-

North Pelham, Ontario, Canada.

2992-John Jackson & Sons

OUR CUARANTEE, IS PLAIN AND TO THE POINT. Three boxes of NO-TO-BAC, 30 days' treatment, costing \$2.50, or a little less than 10c a day, used according to simple directions, is guaranteed to cure the tobacco habit in any form, SMOKING, CHEWING, SNUFF and We, the pubishers of this CIGARETTE HABIT, or money refunded by us to dissatisfied pur R. Co. to be We don't claim to cure EVERYONE, but the percentage of

> the occasional failure than his money. We have faith in NO-TO-BAC, and if you try it you will find that NO "O-BAC is to you WORTH ITS WEIGHT IN GOLD.

Penfold Lady 5971, Dale Ewe "27" 5859, THE CHEROKEE STRIP. "25" 5854-D. H. Dale, Glen

Scenes Which Attended the Mad Rush to Secure Choice Sites.

Exactly at noon on Sept. 16 there were imber of signal guns fired on the border of Jackson Ewe "35A" 5626 and Kodack the Cherokee Strip, which announced glad tidings to the eager multitude who looked into the promised land. After the volley the surging crowd emitted in unison one great ell which rent the heavens, and then a mad ish to secure available sites was begun.

The order of the Interior Department pre-enting the carrying of concealed weapons into the country was, as anticipated, a nullity, anless it may be said that the weapons were not concealed. Before the puffs of white moke which shot upward into the air an ouncing the appearance of the supreme hour nad been blown away by the west wind, there was a gleam and glitter of steel above the heads of hundreds of riders in the line. In the bright sunlight they dazzled the eye of the beholder. A roar, as of artillery, came from a thousand pistols, discharged almost intantaneously, followed by a smoky pall which lmost covered from sight the moving ranks, and then chaos. The firing continued, men se in their saddles and fired until their re-



The scene was calculated to strike terror nto the heart of any boomer not well fortified with faith, fortitude or whisky. It was doubtless prearranged to have that effect, for the Cattle Kings had a small army of cowboys cunning for claims to be taken in adjoining quarter sections, enough to constitute town

Long before the firing had ceased the column had moved. There were racehorses trained to speed in the line. They could be dis-tinguished by the outstanding neck, the tension of the muscles and the stretching out of every limb toward the goal. At the very instant of departure they darted out ahead o the mass. These animals were ridden by men either in the employ of townsite companies or cattle companies. The homeseekers relied upon their best stock. They were distanced by the scores of racers at the start, but there were 20,000 claims in sight and they and their riders pressed on. The bicycle was used with good effect by some boomers.

The Cherokee Strip, comprising 6,388,950 acres, lies in the northwest corner of the Indian Territory. Its northern boundary is the southern line of Kansas, and its southern boundary parallels its northern line, giving it a width of 57 miles and a length varying from The extent of the tract is 167 to 210 miles. not easily comprehended without comparison. It is equal to the combined area of two Rhode Islands, Delaware, and Connecticut, with 167 square miles to spare. It became a part of Oklahoma Territory when the President issued his proclamation three weeks ago, and is now under its laws. It makes Oklahoma's area 39,303 square miles, and raises that Territory to the dignity of being larger than 12 different States of the Union.

The strip is watered by the Arkansas and Cimarron rivers, several smaller streams and The settlers will not lack trans sparrows are sold to restaurants annually in the cities just mentioned, and often served to many creeks. portation facilities. The Santa Fe has two nes through the country, one passing through directly south from Arkansas City and the Of course, the epicure would detect the other diagonally from Kiowa to the southfraud at once, but to the uninitiated the flavor is new and rich, and the experiment worth repeating. Unlike the true rice bird Between the Santa Fe's line western corner. the Rock Island passes through from Caldwell, Kan., in a north and south line.

Indian Corn for the German Army.

Under date of Aug. 2 Consul-General Edwards, of Berlin, reports to the Department of State that the German Minister of War has ordered the military authorities to use Indian corn, mixed with oats, in making up the rations of the army horses. This will lead to heavy importations of American corn.

Grange Meetings.

and similar food, and in all probability the time is not far distant when this practice will The Texas State Grange fair began at Mo ted in the Gregor Sept. 28, and will continue till Oct. 5. | certainty as to tariff legislation,

PETITIONS AND BILLS.

Introduced in Both Houses of Congress for the Interest of Agriculture.

SEPT. 15. Senator Allison, of Iowa, presented a petition of business men and farmers, of Gladbrook, Iowa, praying for the unconditional repeal of the silver purchasing clause of the Sherman Law. Ordered to lie on the table

Senator Cameron, of Pennsylvania, preented a petition of Greenfield Grange, 226, of Erie County, Pa., praying for the free coinage of silver. Ordered to lie on the table. SEPT. 16.

Senator McMillan, of Tennessee, introduced a bill incorporating the Society of American Florists. Referred to the Committee on Agri-

culture and Forestry. SEPT. 20. Senator Dolph, of Oregon, introduced a bill authorizing the State of Oregon to import machinery for a jute mill free of duty. presented with it resolutions of the Chamber of Commerce of Portland, which explained the

reason for introducing the bill. It was referred to the Committee on Finance. He also introduced a bill to amend an act entitled "An act to forfeit certain lands heretofore granted for the purpose of aiding in the construction of railroads and for other purposes." The bill, with its accompanying papers, was referred to the Committee on Public Lands. In explanation of the bill Senator "The bill is not so formidable as its title would indicate. Its object is to further extend the time of purchase of forfeited lands under the provisions of the forfeiture act to pay for their lands. I regret to be compelled to come to Congress and ask for a further extension of time. The truth is, those people who are expected to pay for their lands the present year, but owing to the low price of wool, their wool is stored in warehouses and they cannot sell it, and wheat is so low that with the large amount they have diseases and conditions for which carcasses to pay for transportation they cannot sell it, and unless they are relieved they will be unable to meet their payments." SEPT. 21.

Senator Cameron, of Pennsylvania, pre-sented petitions from Waterford Grange, 423, of Frie County: of Dicksonburg Grange, 556. of Crawford County; of Turnpike Farmers Alliance and Independent Union, 318, of Erie County; of Mill Village Grange, 131, of Eric County; of citizens of Crawford County; of Greenfield Grange, 226, of Eric County and Phillipsville Grange, 147, of Eric County,

of the State of Pennsylvania, praying for the free coinage of silver. Ordered to lie on the He also presented a memorial of Farmers' Alliance 437, of New Hamburg, Pa., remonstrating against the unconditional repeal of the Sherman Law unless some provision is

made first for the free coinage of silver. Or dered to lie on the table. He also presented a petition from Pomona Grange, 4, of Eric County; praying for the enactment of such legislation as will increase the volume of money and restore silver to its for mer place as money equal with gold. Or-

dered to lie on the table SEPT. 24 Senator Quay, of Pennsylvania, presented memorial of the Agricultural Society of ancaster County, Pa., remonstrating against the reduction of duty upon imported tobacco. Referred to the Committee on Finance.

SEPT. 25. Senator Cameron, of Pennsylvania, pre sented a resolution of Lower Windsor Grange 565, of Yorkana, Pa., favoring the passage of House bill No. 1, providing for the repeal of the silver purchasing clause of the Sherman Law, and remonstrating against the free coinage of silver. Ordered to lie on the table. He also presented a petition of Corry Grange, 55, praying for the free coinage of silver. Ordered to lie on the table.

Senator Dolph, of Oregon, presented a peti-tion of sundry citizens of Wasco County, Ore., praying for an extension of time to make final payment for lands within the forfeited limits of the Northern Pacific Railroad land grant. Referred to the Committee on Public Lands SEPT. 27.

Senator Faulkner, of West Virginia, introduced a bill to enable the people of New Mex-

ico to form a constitution and State govern

ment and to be admitted into the Union on

an equal footing with the original States Referred to the Committee on Territories. Wanted Information in Regard to South Dakota.

George W. Rider, Rose Lawn, Wis., would like the address of parties living in the Black Hills, S. D., and to hear from someone who an give information about the sheep raisin industry in Wyoming. Mr. Rider would like to know the price of sheep; also price of land, and whether the sheep have to be fed

Tobacco Notes.

during the Winter.

The general impression in the Western markets is that the tobacco growers are injuring their interests by crowding too much tobacco into the market at this time, when manufacturers are fighting shy because of un-

MEAT INSPECTION.

CURED HIMSELF, HIS FATHER, HIS BROTHER-IN-LAW, AND HIS

CHEWED TOBACCO FOR FIFTI YEARS - AFTER SPENDING \$1,000

FOR TORACCO NO-TO-BAC CURED HIM. FOR TORACCO NO-10-BAC CURRY HIM.

STRINGFIELD, ORIO, Rev. 22, 1822. — Gentlemen: On the leth day of 1, 1822, I commenced the use of No-To-Bac, and cast tobacco out of mouth and have not tasted the weed since and have no desire for mouth and have not tasted the weed since and have no desire for Luid advise all who want to stop using tobacco to give No-To-Bac a.

1. I used it for fifty years and spent \$1,000 for tobacco. No-To-Bac a.

GEO. W. WASKEY.

"CIGARETTE FIEND FOUR YEARS."

READ THIS Where to Buy and How to Order

NO-TO-BAC.

Where the MILL be MADE GOOD and YOUR PATRONAGE APPRELIATER.

WILL be MADE GOOD and YOUR PATRONAGE APPRELIATER.

WILL be MADE GOOD and ACT STEPPEN AND ACT

All Pork Slaughtered for Interstate Commerce Must Hereafter be Inspected.

Secretary Morton has just issued an important order broadening and perfecting the meat inspection service of the Agricultural Department. After Oct. 1 all hogs slaughtered for the interstate and foreign trade will be inspected before slaughter, and again at the time the carcass is being dressed. This is termed an ante and post-mortem inspection, and has been enforced heretofore in the

inspection of cattle and sheep only The inspection of pork has so far been confined to the microscopic examination of car-casses intended for the export trade. By far the greater part of the pork produced in this country is consumed in the domestic trade, and this has not been inspected. The law provides, however, for an inspection of all neat which goes into the interstate trade, and Secretary Morton has determined that our

own people shall have the benefits of this in-spection as well as the foreign consumer. The microscopic examination of pork which is intended for export to countries requiring such inspection will be continued, but will be confined to this trade. The people of the United States so generally cook their pork before eating it that trichinosis is a curiosity to most of our medical men, and its preven tion by microscopic inspection is not considered a live sanitary question. Indeed, there is no evidence that the uninspected American

pork ever caused any trichinosis among Eupean consumers. The inspection which is now inaugurated is a measure of the utmost importance for protecting the consumer from unwholesome meat. Accompanying the order of the Secretary is a letter from Dr. D. E. Salmon, the Chief of the Bureau of Animal Industry, to the inspectors of meat throughout the counsecure uniformity of action at the different

abattoirs. The instructions to inspectors cover the inspection of cattle, sheep, and swine, and their products, and will be enforced in all parts of the country. Inspectors are instructed to condemn carcasses and to see that they are not used for human food when afconditions: 1, hog cholera; 2, swine plague; 3, charbon or anthrax; 4, malignant epi-zootic catarrh; 5, pyæmia and septicæmia; 6, mange or scab in advanced stages; 7, advanced stages of actinomycosis or mumpyaw; 8, inflammation of the lungs or of the intestines; 9, Texas fever; 10, extensive or generalized tuberculosis; 11, animals in advanced stage of pregnancy or which have recently given birth to young; 12, any disease or injury causing elevation of temperature or affecting the system of the animal to a degree which would make the flesh unfit for human food. Any organ or part of a carcass which is badly bruised or affected by tuberculosis, actinomycosis, abscess, suppurating sore, or

tapeworm cysts must be condemned. The enforcement of these instructions will sure wholesome meat for the interstate and foreign trade, which is all that the Department of Agriculture has under its control, but he municipal boards of health must still be depended upon to protect consumers from diseased animals which are sold for consumption in the States where killed.

Inspectors are already at work at Kansas City, Nebraska City, Ottumwa, Omaha, Chicago, Milwaukee, Indianapolis, Buffalo, Boston, and Philadelphia. The work will be extended to other places where pork packing is carried on. But little trouble is expected in finding a corps of competent inspectors.

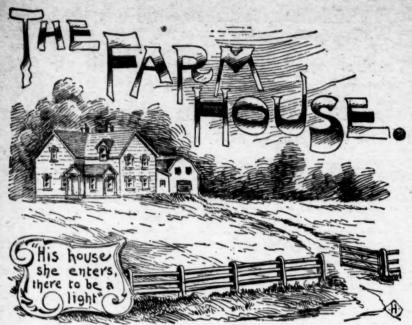
These must be regularly-educated veterinarians. Congress appropriated \$850,000 for the work, and it is believed that it can be carried on inside of that sum.

Secretary Morton's Retrenchment.

Secretary Morton's estimates for the ensuing fiscal year, which have been sent to the Sec retary of the Treasury, are considerably below the appropriations for the Agricultural De-partment for the current year. The princi-pal reductions are found in the Bureau of Animal industry, the Weather Bureau, and the seed division, for which he asks, respectvely, \$150,000, \$94,000, and \$100,000 less than the sums appropriated for the current year. Other economies bring the sum total of reductions from the appropriations for this year's expenses in his estimates for next year to \$367,000.

To Enlarge the Department of Agriculture.

Representative Breckinridge, of Kentucky, has introduced a bill, which has been referr to the Committee on Agriculture, to put the Geological Survey, the Bureau of Education, the Bureau of Statistics, and the Coast and Geodetic Survey under the control of the Department of Agriculture. The heads of these Bureaus will probably resist this transfer vigorously. They have been running independent ever since their organization, having no one above them but Congress and the President, and are not at all disposed to accept reductions to the rank of other Bureau



Ben Burlap's Barn.

Ben Burlap bragged about his barn with every man he see,

He said it wuz the finest barn that any barn
could be;

Sex he, "The worl' is full er barns; but still I calkerlate
There ain't no barn like Burlap's barn, an' hain't
been up to date."

An' w'en yer saw a wild-eyed man who raised consid'ble rumpus,
An' waved an' flopped his arms aroun' to all
p'ints of the compass,
An' swished his wiskers in the wind an' spun a haff-day yarn, You'd know it wuz Ben Burlap, sure, expoudin'

An' I went down to see his barn, he hung on so One day I tol' my wife I guessed I'd go and take it in. take it in.
"Twuz jest as good ez Jim hed said, ez fine ez it
could be,
It beat all barns I ever see, or ever 'spect to

W'en I come out sez I to Jim, "What's that small buildin' there, That kinder wobbly lookin' thing, that tumble-down affair? It looks so rickety an' weak 'taint fit to hold a "Oh, yes," sez Jim, "it's full er mice; that ar hut is my house."

-Sam Walter Foss.

Special Correspondence THE AMERICAN FARMER. THE MIDWAY.

The Favorite Resort for the Fun-Loving Tourists.

Soon after the noontime rest throngs of sightseers turn their faces westward and find they have arrived in the Plaisance just as activity is at its hight.

As you stop under the bridge to hear "After the Ball" through a phonograph you grow impatient for the very theatrical rendition to end, for far in the distance may be heard indistinct snatches of National melodies, and then further on you try to detect from the confusion of tongues a known language you can

Most of the Nations represented have among other attractions a theater. The Chinese have the stars of the celestial stage with them, and their costumes were valued at \$15,000 by the custom house collector.

Wong Loy stands at the door and exhorts all to enter, and intimates, in what is supposed by the proprietors of the theater to be fluent English, that all who fail to seize the opportunity will spend a life of regret.

They have also in this Chinese temple a fortune teller, who, for a small consideration, will read the book of Fate for you. He operates through an interpreter, and upon making your deposit concerning which you crave enlightenment. These topics are "When death to stay. will come," Lucky or unlucky," "Successful in business or not," "Poor or all manner of material and shape. The rich," "Curable or incurable," "If suc- slight woman wears a short one made cessful in marriage and when," and rather full, with a great deal of trim-"Family or not." attached to Prof. Hin's book is that it contains no evil fortune for anyone. The receipts, over which incense is always burning, register about 150 fortunes a day, and so far there has been not one "Uunlucky" or "Incurable."

The Joss house here is not what we thought a Joss house was, but it is vowed by many to be true to life. Many costly and antique treasures are in this temple. A set of scenes carved in wood representing "Ten Courts of Justice in Hell" attracts general attention.

The theater's work is supplemented by an orchestra of six pieces. The musicians are on the stage with the actors, and sometimes when the climax is imminent they have to exert themselves to keep out of the way of the performers. The sounds made by this orchestra cannot be fully appreciated by any but those born in the Flowery Empire; and it amused the managers of the Fair when these people asked that the sens of Scotia be prohibited from blowing their bag-

The camel and donkey riding is the greatest attraction in the streets of Cairo. It is great sport to stand by and watch the vain efforts of a friend to ride gracefully, and it is just as much fun to mount one of the ungainly desert beasts and wonder which quarter is to go up or the garment is 42 inches long. down next.

A ride on the Ferris wheel gives you a good idea of the city of Chicago if it is a clear day; but the view is much prettier by night.

Almost every establishment offers souvenirs for sale, and as a rule they appear to be doing a flourishing business. One, however, closed out. The stand the lining made together, then the two still remains, and over it on a semicircular board was written, "60 per cent. seams and overcast together at top and off if taken away at once." Seeing plenty of room unoccupied, a very fleshy woman sat down on the counter with the sign over her head, and when some young

people came along they laughed.

The estrich farm is quite an instructive affair, and the man at the gate does all he can for you. He urges you to "come | made and put on. It is of velvet, of the in and see the royal bird whose home is color of the cloak, and is lined with silk. where Africa's sunny fountains roll down | The top of this velvet is at the throat their golden sanda.

A little further on a man calls to you to pay "Quarter of a dollar, quarter of a dollar to see the Indians dance and

holler." The only good thing in the Irish Vilage are the performances of the little blonde boy who sings and dances a light heart into all of the spectators.

The Javanese bazaar is always crowded by shoppers and lovers of china. One young man used to make an excuse to ourchase some trifle every morning from a certain counter where a young woman from Java presided in native costume. One morn he missed her from the accustomed spot and asked the rather pert American, who was there in her place, "where is the pretty Javanese girl?" She replied, "I do not think she is pretty; but she is interpreter at the Administration Building."

A ride around the snow slide is the most exhilarating of any of the diversions on the Midway. The long sleighs hold a dozen gay pleasure seekers. A long string of bells is attached to each sleigh and when the occupants are shot around the curves, old men forget they are not boys, and young women forget that it is not ladylike to shout.

Opinions vary as to the standard of the exhibits and entertainments in this which was worn with a Navy blue cashdivision of the Fair. There is very little of the world which, viewed as a spectacle, may not be a source of profit, yet the popular verdict is almost sure to be the correct one, and some of the establish- if it can be made at home. ments have closed and others are talking of doing so.

There is one place that seems to grove upon people, one where, if you go one night, you are sure to want to go the next. This place is Old Vienna, situated well toward the western end of the

This is the place where you love to meet your party after a hard day of sightseeing and take your time over a good, German dinner, while the most famous of Austrian bands discourses to you music the like of which cannot be heard elsewhere on the grounds. Around Old Vienna will cluster the pleasantest memories that many a tourist treasures of the Summer spent in the dream city.-M. A., Chicago, Ill.

Heavier Wraps.

They are nearly all capes in some you are told to choose six sticks from a form. Many of the late Summer gowns vase and hand them to the fortune tel- had fancy capes much trimmed with lace ler. Each is numbered; these numbers and feathers, and made of the same maare gravely recorded, and then you are terial as the gowns. This led many to allowed to choose one of seven subjects suspect that the military cape which made its appearance last year had come

The capes to be worn this Fall are in The greatest value ming on it; the short, stout woman wears one a little longer and one more severe in outline.

One pretty short cape is made in deep box plaits of black satin at the bottom of a deep, perfectly-fitting yoke. At the top of the plaiting is a cascade of black lace, and a high collar is covered with lace falling in similar folds.

All fancy capes are untrimmed at the bottom, having all the trimming massed about the throat and shoulders in collarets and on the vokes.



Some of the cloaks are two capes, one 18 inches shorter than the other when

This is made of thin black broadcloth, with edges left raw. The two capes are sown in at one time to a yoke, which is cut in six pieces with curved seams, and extends to form a flaring collar. The yoke is lined with three thicknesses of tailor's canvass. The goods is made up separately and pressed, the canvass and accurately basted along each of the short bottom. The cloak may be lined or not. as the owner chooses, but a pretty soft surah silk, overshot in wine and blue, makes a great addition to the elegance

by the figure of the wearer. The top of just as well have sitted to them a the flaring, stiff collar may be finished turnover collar. If you have no pattern, with a cord, a row of feather trimming or an inch band of fur. The same finish may be used for the top of the velvet plaiting; but do not load a well fitting garment, made of good material, with too much that tends to detract from its neatness. Large hooks and eyes are used to fasten it from the throat to the

bottom of the yoke. If the wearer is an elderly lady, black throughout is most desired; but if she is still young," relieve it a little by some bright lining, and leave the more sober tones for later years.

A half-grown school girl who needs something for these chilly mornings, and something that can be easily adjusted, would look well in a dark-green or brown, or wine cape that could be cut from her mother's pattern with a few alterations. Make the seams in all of the yoke pieces a little larger, otherwise make it exactly like the other. Instead of satin or surah for a lining for the



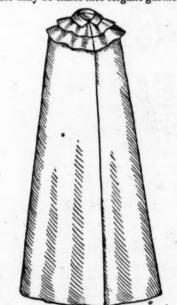
yoke, use some of the goods or black farmer's satin. Instead of the double cape of broadcloth a deep, fulled flounce, made long way of the goods, is put on to form the body of the wrap. The material for this may be of flannel or waterproof, and probably something on hand may be converted to this use. The heavier the goods the scantier it may be made, and if the goods is wide-double fold, the material may be split down the fold and pieced down the back. If you buy new material and are anxious not to cut into it, or if you find a remnant that is a little short, make the yoke of velvet of the same color.

One little girl had one of terra-cotta flannel, and it was trimmed all around with a row of black fur that had been on a cloak of her mother's. The garment was completed by having ribbons to tie with long bows and ends at the throat. A neat felt hat trimmed with ribbons of the same color completed the outfit, mere dress. For a child whose mother is anxious to fill her head with something besides ideas of dress, this is a very sensible and inexpensive suit, especially

The girl in question may be able to assist a little in making it; if not, she can at least save you a little time from other work. A little sacrifice on her part that will suggest to her the amount f work necessary to make her clothing will make her more careful about their

For wraps made of the heaviest of materials and for wear during the coldest months the same general idea obtains.

The Russian circular is here again, except that it is not fastened down to the bottom, but only to the waist. It has little capes across the shoulders and perhaps a watteau plait down the back. By using handsome fur and lining, these may be made into elegant garments



by one handy with shears and needle at a third of the cost of ready-made garments of the same grade. A wise way to do is to send for a pattern of your size, and then experiment on some cheap calico that may afterward be pieced into comfortables. Fit this temporary garment, and then estimate the amount of rections given, and you will doubtless astonish yourself with good results.

There is no wrap that will so soon pay for itself as the old-fashioned "circle," cut after Red Riding Hood's pattern, For cold weather or storms or travel, it is always useful. They will be much worn this year and are modernized by three circular cape collars. The only criticism against them is that they are heavy and hard for walking, but anyone who rides much will find them in valuable.



turnover collar. If you have no pattern, cut one from a man's linen collar. The higher ones are, as a rule, more becoming, but sometimes comfort demands that they be cut low in the neck.

For children six years and younger, the favorite "Mother Hubbard" is as popular as and style of cloak. Long, full sleeves are made tight at the wrist by a band, and may be easily altered to suit the growth of the child. One or two circular capes are added, making a warm garment with the general effect similar to that of the wraps worn by the older people.

readers.-Ep.]

INFANT'S BOOT.

Cast on 45 stitches. First row—Th o twice, p 2 to, k 2; p to within 4 stitches from the end, then k 2, o

twice, p 2 to.
Second row—Th o twice, p 2 to, k to the center stitch, widen 2 stitches by knitting the loop at each side of the center stitch; k to within 2 of the end, then o twice, p 2 to. Repeat these two rows 5 times more.

Twelfth row—Th o twice, p 2 to, k 2, p 49,

k 2, o twice, p 2 to.

Thirteenth row—Th o twice, p 2 to, k 53, o twice, p 2 to. Repeat the last two rows 10

times more.

Thirty-fourth row—Th o twice, p 2 to, k 2, p 49, k 2, o twice, p 2 to.

Thirty-fifth row—Th o twice, p 2 to, k 2, o twice, n, n, k 41, n, n, o twice, k 2, o twice, p 2 to.

Thirty-sixth row—Th o twice, p 2 to, k 2, p 1, k 1, p 1, k 1, p 41, k 1, p 1, k 1, p 1, k 2, o twice, p 2 to.

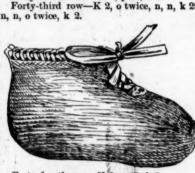
twice, n, n, k 33, n, n, o twice, k 8.

Thirty-eighth row—Bind off 6, k 2,

twice, n, n, k 33, n, n, o twice, k 8.

Thirty-eighth row—Bind off 6, k 2, p 3

Thirty-ninth row-K 2, n, k 37, n, k 2. Fortieth row—K 2, p 39, k 2.
Forty-first row—K 2, p 39, k 2.
Forty-second row—K 2, p 37, k 2.
Forty-third row—K 2, p 37, k 2.
Forty-third row—K 2, o twice, n, n, k



Forty-fourth row-K 3, p 35, k 3. Forty-fifth row—K 2, n, k 33, n, k 2. Forty-sixth row—K 2, p 35, k 2. Forty-seventh row—K 2, n, k 31, n, k 2. Slip the stitches onto 3 needles, 12 on each of 2 needles, and 13 on the third. Narrow the edge stitches together on the third needle, thus leaving 12 stitches on each of the 3

K 14 rounds plain, then narrow for the toe by narrowing once at the end of each needle in 1 round, then 1 round plain, and repeat the last 2 rounds until but 6 stitches are left on each needle; then k 2 to, until all are gone. Lace the shoe with baby, ribbon and tie in a

dainty bow.

This shoe is recommended by some for night wear in cold weather for children who wear leather shoes during the day. For this use it might be knit of coarse yarn on large needles.—

WOMEN'S WISDOM.

WOMEN'S WISDOM.

TO EVERY WOMAN.—For the present, we have this broad offer to make to all readers of The Farmhouse Department: We will give a full year's subscription to THE AMERICAN FARMER to each friend who will send one-half column of available matter within that year. Subscription may be a new one, or it may be an extension of one already in our books.

CONDITIONS.—But note this: We shall apply at least three tests to every article, viz. Is it brief? Is it fresh and bright? Is is really interesting to women? Let intending contributors apply these tests before sending their matter. In range of topic these may cover everything of special interest to women. Indifferent, prosy, or stale matter is not wanted. We want to hear from our eleverest women, with facts, fancies, and experiences all their own; about their housework, fancy work, or the training and education of their boys and girls.

The contribution may be upon one subject or composed of short paragraphs on a variety of topics. All MS, must be written on one side of the paper only. All communications for this department, care of THE AMERICAN FARMER, Washington, D. C.

Homestead Life.

EDITOR FARMHOUSE: For over five years we have lived on these beautiful, though barren plains of eastern Colorado. We have middle age have the only home we ever really owned. These five years have been quite a mixture of shade and sunshine.

The country is beautiful to the eye, and we seldom lack for sunshine. The soil is good but owing to the lack of rain we have never yet been able to make the ground yield us living. Those who can afford to get a good start in stock, and are fortunate enough to secure a good well and put up a windmill are in the best way to make a living. For four months during one Winter my

little girl, six years of age, and I held down material needed. Follow closely the di-the claim in our little sod shanty, while my nections given and you will doubtless husband went away and worked in Pueblo to make money to keep us through another year We were four miles from the store and post office and one mile from the nearest neighbor and many a day I have walked to the office and back when I felt sure there must be a letter from the absent one. The neighbors frequently brought my mail, but sometimes they did not go the day I expected a letter, and sometimes, I am sorry to say, they for-got me. I used to think we should be quite got me. I used to think we should be quite grateful to the Government for allowing one to make a home by living on the land for five years, but now I think we fully earn it.

I think every woman who lives on these plains five years in a little sod shanty, or worse, a dug-out, and burns Buffalo chips every Summer, as many a woman I know has done, should be allowed a pension by the Government. Perhaps some of my Eastern sisters have never heard of Buffalo chips. They are the sun dried manure of the cattle which roam at will over these broad prairies They make excellent Summer fuel as the fire goes out and stove cools off, so quickly. It takes some experience to learn how to use them properly. I prefer them to cobs, although they make more ashes. Some of the poorer people are obliged to use them both Winter and Summer, coal being so high here. Some of the women when they first come to this country declare with upturned noses that they never could bear to use "chips," they could not bear to touch one; but they generally come to it, and indeed, we old timers almost forget to wash our hands after replenishing the fire.

When a woman who has not been here very

wondering at pictures of trees, and talking about how, if he could get to them, he would climb ap and throw down apples to mamma

we are going to take the children back.

East this Fall for a change. I myself have not been lonely or discontented here. We have always had plenty of reading matter, and I have had little children to care for. I have had little children to care for. I have had little children to care for. I like the country, and would like to always make my home here if we could have sufficient rain to raise crops. We have good schools our schoolhouse is one mile from us. The population is so scattered that some must go farther to school than is convenient. We are four miles from church and railroad station We can raise our own chickens and have eggs in abundance, and nowhere can this country be excelled for good and cheap beef, milk, and butter. We have free pasture the year round. We have made two additions to our original sod shanty of one room since coming here but the sod room is the most comfortable room we have ever found anywhere; cool in Summer, because the sun cannot penetrate the thick sod walls, and warm in Winter, as nothing freezes in it. Wherever I may go, or however old I may grow to be, I shall always remember with pleasure my "little old sod shanty on the claim."—MRS. CORA C. SMITH Towner, Kiowa Co., Colo.

Household Hints.

EDITOR FARMHOUSE: To lessen the odor of cooking onions place some vinegar on the If the hands are rubbed on a stick of celery

after peeling onions the smell will be entirely Ink yields to milk, whereas water has no

A simple remedy for neuralgia is to apply grated horseradish to the temple. Prepare the horseradish in the same manner as for table use. If the eyes are tired and inflamed from sit ting up late or long travel apply a soft linen

dripping with hot water, as hot as you can bear it. You will feel the eyes strong and free from pain in half an hour.

It is not everybody who can make a bed well. In the morning take each sheet and blanket from the bed separately and hang

over chairs, so that the air will circulate around them. Shake up pillows and turn up the mattresses, so the air will circulate about Air the rooms and bedding for at least an hour. A cloth wrung out of hot water and applied

to a bruise prevents discoloration and keeps down the swelling.—Mrs. ALICE VREN,

A Warning to Young Lad

EDITOR FARMHOUSE: When I was a young lady I kept the best company the place afforded. I was good looking, and had a pleasant way. I had many friends, full of fun, and enjoyed company very much. I had many admirers, and could have married well. Finally I became engaged to a well-educated man, a very wealthy man. We were engaged some time, and then I allowed my relatives to influence me to tell him that I thought we would not live happily together. He was very much shocked, and soon broke the en gagement. He had a severe sickness, caused by this, about two years after he married. remained at home some years, and finally married a man very inferior to the one should have married. I wish girls would realize that to break an engagement is a very serious thing, and people are seldom prosperous afterward.—Mrs. D. J. S.

For the Home Table.

This recipe is chosen by many, as it calls for green tomatoes at a time when they are plenty and ripe ones are scarce. It also has the advantage of being made after cold weather has come The green tomatoes may be picked the night before frost threatens, and may be kept several days in an even temper-

ature without injury.

Pick one peck of medium-sized green tomatoes and ten onions. Chop them separately, very fine, mix together, and add one chopped red pepper.

Mix together two tablespoonfuls each of ground cloves, cinnamon, and allspice; to these add one quart of sugar, and after they are thoroughly mixed add one quart of good cider vinegar. Pour the liquor over the tomatoes, stir thoroughly, and set it on the top of the stove to boil slowly for five or six hours. CRAB APPLE JELLY.

After currant jelly there is none better than that made of the little wild crab apple, which is probably the parent of all of our apples of to-day which have been developed into such widely separated families.

To prepare this jelly and insure success the following method has been thoroughly tried:

Wipe the fruit thoroughly, take out the stem and blossom and cut out all specks or bruises. Cut each apple in four pieces and put in an earthen dish, cover closely, and set in a kettle of cold water, with the water reaching as high as the fruit. Gradually bring the water to a boiling point, and let it boil steadily for eight hours. This slow, steady cooking insures the extraction of the clear juice. Probably this has taken up your working hours of the day, so merely set the fruit away in some cool place till morning.

When it is thoroughly cold, press out every particle of juice through a cloth

Measure the liquor accurately, and after it has boiled briskly for 20 minutes and skimmed add a pound of sugar to every pint of juice. As soon as the sugar is thoroughly melted, skim and then test and as soon as possible remove from the

Paper dipped in brandy is thought by many to be better than any other, as butter is apt to become rancid. If you wish to have a variety wash a rose geranium leaf, the size of a silver 50-cent piece and lay in the bottom of the bowls. The scalding, hot jelly will cook it and it will come to the top. Just before the jelly hardens pick out the leaf. This adds a delicate rose flavor that is very agreeable to some people.

Tame crab apples may be treated in the same way, and all other fruit from which it is difficult to extract the

Wild grapes and all varieties of the berry family are more quickly handled, as by crushing the fruit the juice is easily extracted.

remove the stem, flower end and core. over the fire, having already placed in Save the peel and core. Drop the peeled halves into water, acidulated by using the juice of a lemon or two tablespoonfuls of pure wine vinegar to every

gallon.

Put the peelings and cores in a porcelain-lined kettle, with half a cup of water to every pound of the fruit weighed out. Cook the peelings and cores very slowly in this water for about an hour. At the end of this time strain out the juice and use it to make a sirup with the sugar. There should be about a cup of the liquid to every pound of the sugar. Let this sirup come to the boiling point, and then cook as many pieces of the crab apple as you can without crowding them. As soon as they are clear and transparent and tender enough to be easily pierced with a broom splint put them into jars, and continue the cooking until all the pieces are cooked. Boil the sirup down a little, then strain it over the pieces of preserved crab apples. There should be just enough to cover them, and the sirup will almost turn to jelly around the fruit.

PUMPKIN PIE.

There are three ways of preparing oumpkins for pies. Some boil it as they would potatoes or steam till tender, then add the usual ingredients for the filling of a pie. This makes a light-colored pie, and more sugar is necessary.

Then we all have known what it was to have to watch the pumpkin and keep it from burning by an occasional unwilling stir. About six hours of patient labor is necessary to procure the sweet stewed pumpkin that our New England mothers used to make and we used to eat.

Then still another process does the thrifty housewife add-that of drying to stewed pumpkin, that she may add it to her list of Winter stores.

But pumpkin pies are never so good as in the golden days of October and November, and this is the way to make

Take two cups of pumpkin, add four cups of rich milk, half a teaspoonful of salt, two teaspoonfuls of ginger, one of mace, one of nutmeg, and one of cinnamon. Beat five tablespoonfuls of sugar with five eggs and add them slowly to the pumpkin and milk. Add also a cup of cream. Bake the pies in an open crust, and be generous with the filling. A simpler rule for pumpkin pie allows a cup of pumpkin to a pint of milk and one egg to every pie, with sugar, nut-meg, mace, and salt to the taste.

CANNING CORN. Get from your druggist one ounce of tartaric acid, pour over this half teacup

boiling water and stir till dissolved. Cut corn from cob, put over fire in enough water to cover, adding one tablespoon dissolved acid to each quart of corn, cook till tender, and fill glass cans as quickly as possible, putting corn in the cans as near boiling heat as possible. Watch the cans and screw down the lids every half hour or so tal cold; the next day wrap in dark-brown paper and set in a dark, cool place. When wanted for use pour out in a colander, rinse thoroughly, and put over fire in water to cover in which has been dissolved a little soda, just enough to take away the sour taste; finish cooking as usual.

Green beans are canned the same way, only one teaspoon of acid to every quart of beans. I never cook more than two quarts at a time. I always buy new rubbers every year, and hardly ever lose a can of fruit.—HENRY'S WIFE, El Paso, Tex.

SWEET CUCUMBER PICKLES.

Piace the cucumbers, which should be very small, in a weak brine over night. Next morning remove the cucumbers, scald the brine, turn it over the pickles and let them stand for two days. Repeat this process on the third morning, let the pickles stand for two days longer. and then scald the brine (removing the pickles as before) each morning until the eighth day. Then take enough vinegar to cover the pickles, and add a little molasses, enough sugar to make the vinegar as sweet as desired, and cinnamon, allspice, and cloves to taste. Remove the pickles from the brine, place them in the seasoned vinegar, heat thoroughly, and place in jars.

MUSTAPD DRESSING.

An excellent mustard dressing to be used on mixed pickles, green tomato pickles or cut cucumbers is made thus: To three pints of vinegar allow a cupful of sugar, three-fourths of a cupful of flour and half a pound (scant) of mustard. Mix the flour, sugar, and mustard together, and wet to a thin paste with a little of the vinegar, stirring the paste until it is perfectly smooth and free from lumps. Heat the remainder of the vinegar, and when it boils stir in the paste. Cook only about five minutes, stirring constantly, and add a generous teaspoonful of salt at the last. When the dressing is done it should be like thick cream.

MRS. RORER'S OMELET. Now, first of all, see that you have an

omelet pan about eight inches in diameter-one made from sheet iron preferable. The bottom should be as smooth as glass. If not, put into it a teaspoonful of salt, and then with a piece of brown paper scour it thoroughly. Do not wash it after, simply turn the salt out and put in a piece of butter the size of a walnut. Break four to six eggs into a bowl, and with a fork give 12 to 15 vigorous beats, not enough to make the mixture light, but to thoroughly mix the whites and yelks of the eggs. Beating either together or separately robs eggs of their flavor, and also makes small air cells, which expand as the pan is heated and cool as the omelet is turned over for the makes a great addition to the elegance of the garment.

After the cloak and yoke are joined, there yet remains the plaited collar to be made and put on. It is of velvet, of the color of the cloak, and is lined with silk.

The top of this velvet is at the throat line, and its width should be governed

The top of this velvet is at the throat line, and its width should be governed

When a woman who has not been here very long sees anyone coming she will skurry around, throw a dirty apron or something over the chip box and pull the coal bucket around in sight; but that soon wears off. There are children here four and five years of age who have never seen a tree large enough to shade them, nor a brook of running water. My own little boy three and one-half years of age spends much time looking and line, and its width should be governed.

When a woman who has not been here very long sees anyone coming she will skurry a light; and tender one. Do not add salt or pepper to the omelet until it is nearly done. Salt tougheins the eggs. Add one teaspoonful of boiling water to each egg as soon as they are beaten. Put in a piece of butter the size of a hickory nut. Now put the frying pan hickory nut. Now put the frying pan have it for \$2.00. table, thus making a heavy rather than

it a piece of butter the size of a walnut, and as soon as it is melted, not brown, pour in the eggs. Place over a quick fire, shake as soon as the omelet begins to have a set appearance; with a limber knife lift the eggs, allowing the more liquid part to go underneath, thus forming layers, as it were, being very careful not to tear the omelet or it will have the appearance of scrambled eggs. Now, sprinkle the omelet with salt and perper and continue lifting until the whole has been put in a jelly-like condition. If the pan is perfectly smooth the onelet will not stick. When done and set. not hard, slip a knife under the omelet that part next the handle of the pan roll it over, then turn gently on to a heated dish; serve at once. It is before that you should wait five minutes for your omelet than your omelet should await one minute for you.

To Clean Oilcloth.

Wash with a large, soft woolen cloth and lukewarm water. Dry thoroughly with a soft cloth, and afterward polish with milk or a solution of beeswax in spirits of turpentine. Never use a brush, hot water or soap, as they will remove the paint. A solution of two and one half pounds of paraffine in one gallon of turpentine, dissolved by the aid of a little heat, is another excellent renovater for oilcloth. The solution should be anplied while warm with a sponge or piece of flannel. Let it remain for 24 hours and then polish with flannel.

Cleaning Marble.

A serviceable preparation for cleaning marble is made by mixing soda, pumice stone and finely powdered chalk in the proportion of two parts of the former to one of the latter. Pass through a sieve and mix with water to form a paste of creamy consistency. Rub well on the marble and rinse with water.

To Remove Ink Spots.

Take a thick blotting paper or board. and steep it several times in a solution of oxalic acid or oxalate of potassium. Then dry it. If there is a spot to be taken away apply the prepared blotter to the same, and the ink will disappear.

HOT WATER BOTTLES.

With Handles and Covered Nozzles.



Hot Water Bottle

in the head, causing neuralgia, or in causing pleurisy, there is no medic could be used so effectively as hot wrubber bottle, as it steams the body, cores, and distributes the pain throug system, causing it to disappear. Any out a hot water bottle could make a investment than to get one, and after.

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BOYS' SPECIAL SAILOR SUITS.

Here's the Biggest Bargain Ever Offered in The American Market.

Boys' Complete Suit, Extra Pants, Cord, and Whistle for \$1.59.



We fiave been searching for a long time to give our subscribers an opportunity to secure boys' clothing made by the best manufacturers in the country at prices far below those that the manufacturers sell them for to the retail establishments. We have arranged to dispose of 10,000 of these boys' complete blue or gray flannel sailor outitis, consisting of blouse, anchor on collar, two pairs of pants, cord, and whistle (ages 4 and 12 years), all, postpaid, for... \$1.59

These goods are made of Navy blue or gray wool flannel, well finished, and can be had in sizes from 4 to 12 years of age. Anyone desiring to buy a first-class article for little money should avail themselves of this offer.

ART SOUARE FLOOR-COVERING. "Floor-Covering as a Fine Art" is the title of a recent work by a well-known philosopher of the esthetic school, and which is all very well as far as theory goes, for who is there that does not like a well-covered floor, and a nice, natty mat? But THE AMERICAN FARMER can give our philosopher points on the practical side of the question, and just listen how we do it.



For \$1.50 we will send a beautiful jute art square floor-covering, printed on Calcutta jute, in fast colors, fringed at both ends, size 64x9 feet. There are three colors in the border, two in the center, and all finely printed. Express charges must be paid by the subscriber.

Those wishing a larger art square, size 9x13 feet, capable of covering an ordinary room, can have it for \$2.90.

Cock Crowing Contest.

A new amusement has been inaugu-rated in Belgium which permits the

Well Arranged Poultry House.

entirely for laying hens; that is, nothing but nesting places is in this part. It is

30 feet long by 10 feet wide, and 7 feet high, this makes it ample for the

up the flock at night, avoiding too much

crowding on the roosts, and the doors

leading to each roosting section can be

thrown open and they can either pass

through there or directly from the laying

house through the door at the right end

of the laying quarters. The doors are

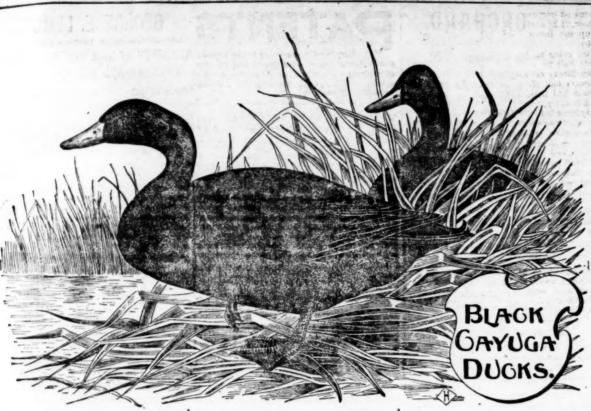
indicated by letter D, the roosts R, and

in the feeding quarters the feed bins and

work bench occupy a part of this room.

134 times.

la mode.



THE BLACK CAYUGA DUCK. A Distinctively American Production, With Many

Good Qualities.

3 HIS DUCK has been bred in this country so origin is lost. Tradition a typical Brahma. says that they are descended from a sort of

Fall and Spring, yet no specimens have ering. been seen which closely resemble them in either weight or feathers. They are sometimes called the "Big Black Duck," "Cayuga," or "Lake Duck."

Many years ago there existed in England a large black duck, which, so far as recollections enabled him to state, Mr. Teebay thought closely resembled, if it was not identical with, the Cayuga. It would not be very improbable that both in England and in this country there might have sprung from the Mallard a black variety of ducks. This would, of course, not detract at all from America's honor in originating the Cayuga. It is a distinctively American production, and as combining in a very high degree so many excellent qualities with so very few faults, it is worthy of the fostering care of the American breeders. If proper care be taken in the selection of the breeding stock, if size is increased and hardiness maintained, there is reason to believe that a greater demand for this stock at home and abroad.

The Cayuga duck of to-day pos a glossy, black head, dark hazel eyes, a dark or black bill, a gracefully-curving neck clad in black feathers, with a greenish luster, a long, broad back, and a long, finely-rounded and very plump body, both of a glossy black hue; long, well-folded black wings, the primaries of the duck sometimes being a dark brown, and the coverts of the drake very lustrous green-black; the tail feathers black, and the coverts of the drake very lustrous; the thighs also black, and black is also preferred for the shanks, although dark slate is allowable. In the sunlight the back and wings often give purple reflections. The plumage throughout, when in the best of condition, should be a glossy black with, in parts, green reflections.

The average weight of the Cayuga ducks per pair is from 12 to 14 pounds, but as they fatten readily they may be made to attain as high as 17 or 18 pounds per pair. By avoiding too close reeding, and a careful selection of the argest specimens for breeders, the Caynga may be made to equal in weight the Rouen or Aylesbury.

The Cayugas are extremely hardy, and as layers they rank among the best,

the Autumn. The flesh of the Cayuga is considered by competent judges to be of the highest quality. Care must be taken in feeding them, as they fatten very readily, and they have a tendency to get down behind.

They are quiet and mild in disposition, rarely able to fly, a foot board being sufficient to restrain them.

Cacklings.

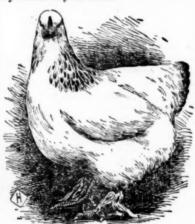
The illustration of the Light Brahma long that all trace of its Hen "Frances" is an exact likeness of

A room best suited to keep your in-cubator in would be one which actually wild ducks that stop in has no thermal changes. A room within Cayuga Lake and Seneca a room brings it nearer to the point de-River on their passage north and south, sired. This is worth your while consid-

> The egg is one of the most nutritious forms of food, because it is easily digested, containing the elements that go toward producing flesh, bone, blood, and nerve, all of which are essential to robust health. Either in a raw or cooked state it is equally valuable.

> Buff Leghorns, like Buff Cochin fowls, present a showy, striking appearance when in clean, bright buff plumage. It seems wonderful what depth of color the Buff Leghorns now bred by some breeders have attained, and records as egg producers that few could believe. These fowls must surely be very popular before many years pass by.

You must always be a close observer of the habits of your laying hens to make them lay well. This observation enables you to learn what she needs for her comfort and usefulness. Light and room are essential, more especially in Summer than in Winter. Poorly ventilated, close, dark quarters are points to be avoided, or else disease will surely lay claim to your flock.



LIGHT BRAHMA HEN FRANCES. INCUBATORS AND BROODERS.

Experience of Those Who Have Raised

Chickens by Artificial Means.

My best hatch was about 66 per cent., at temperature of 103°. My worst hatch was 60 per cent.; regulator got fast and failed to shut off blaze; ran up to 114°. Never used home-made hatcher, but do use home-made brooders only. Description is as follows: producing about 80 or 90 in the Spring time, and sometimes also laying again in broaders only. Description is as follows:

Take common sheet iron 24 x 100 inches, cut in two equal pieces for bottoms of broader 23 x

The Poultryman's Chart. The following chart shows the sectional parts of a fowl:



fain tail feathers. Ving coverts, forming wing bar. Hocks. Shanks or legs. Spur. Toes or claws.

48 inches. Inside measure, eight inches deep; 48 inches. Inside measure, eight inches deep; back, 9x 50 inches; front arranged to drop three or four window glass 8x 10 inches loosely, to be removed for cleaning, etc.; end board, 23x8 inches. Nail upper bottom on first, then one-inch strips across ends and middle, then under bottom so as to admit cold air and hot air heated by lamp. I raised about 75 per cent. of best hatch and sold in

early Winter at five cents per pound.—J. D. HAUGHTELIN, Panora, Iowa.

end almost as low as the small end. The best hatch I had was 76 per cent. The eggs were kept as near on the little end. A high temperature varying from 103° to 111°; most of stairs or ladder leads up to a large room

accommodation of from 40 to to 60 laving hens. Openings from the yard permit them the freedom of the outside when they desire to go out. The second part of the structure is given up exclusively to feeding quarters and roosting places. The entrance to the roosting rooms from the laying quarters is shown in Fig. 2, the ground plan indicated by the letter E. This enables you to divide

Following is my experience in hatching chicks with an incubator: "I have only tried it one season. I set it five times, beginning the last week in January. The weather was cold at the time and eggs scarce, so I had to buy part of them, and I suppose some were chilled before they were gathered. My first hatch was only 61 per cents, my poorest hatch was 50 per cent. Then I run the incubator at a low temperature, varying from 95° to 100°, and the eggs were kept with the big end almost as low as the small end. The best

A WELL ARRANGED POULTRY HOUSE,

mot fertile. I do not test the eggs at all.

"I have never used a home-made machine.
I have not used a brooder of any kind, but think I shall in another year. I cannot tell how many chicks I lost that were hatched with the machine, as there were about as many hatched with hens, and the hens took care of incubator chickens with their own. But the cook, feed, and keep the place warm in cold weather. This part is convenient was kept high The time I kept it low the chicks hatched with the start and more of chicks were weak from the start and more of chicks were weak from the start and more of chicks were weak from the start and more of chicks were weak from the start and more of chicks were weak from the start and more of chicks were weak from the start and more of chicks were weak from the start and more of chicks were weak from the start and more of chicks were weak from the start and more of chicks were weak from the start and more of chicks were weak from the start and more of chicks were weak from the start and more of chicks were weak from the start and more of chicks and above, 21a:22; XX and XX and a bove, 21a:22; XX and XX and above, 21a:22; XX and them died. The first chicks hatched were sold the last week in May for 15 cents per pound; they averaged two and a half pounds. The next lot were sold about the middle of July at 10 cents per pound; they averaged two pounds. For my part, I think an incubator, i it is self regulating, is far ahead of the old hen for hatching chicks.—H. J. LANDON, Vinland, Kan.

Mr. Daniel J. O'Keefe, Southington, Conn. writes: "The best hatch I have had has been 203 chickens from 230 fertile eggs. The chickens being barred Plymouth Rocks. I secure my hatches at a temperature of 103°.

I have never used a home-made incubator as yet, but I am at present working on one. I use a home-made brooder, the description of which is as follows: The broader is 4 feet long 13 inches the lamp box 17 x 9 x 12 inches The tank, which is 54 inches long, 12 inches wide, and 1 inch deep. At the end is a stand-pipe 1 inch in diameter and 15 inches high. The object of this pipe is to give pressure to the water in the tank, and thereby create a circulation. The tank extends through the brooder, extending into the lamp box about six fit over the tank. On the edge of this cover strips of slitted woolen cloth are tacked to reach within an inch of the floor. The floor is held in place by cleats at each end, which can be lowered as the chicks grow older. At first the floor should be three inches below the tank. You will see that the brooder has no bottom except this movable one, but the roof or top is made so it can be taken off. It is made of matched lumber, the boards being fastened together by two cleats. When in place on the brooder it is held by a hook at

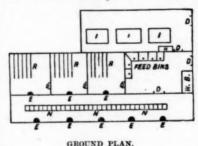
"The lamps I use are made by a tinner for 25 cents. They are made to hold about three pints. 'Diamond' burners have to be used, as they are the only burners that do not re quire a chimney. The lamp frame should reach to within one-half inch from the tank. The lamp box need have no bottom, but should have a small door to get the lamp handily. At the end of the tank away from the lamp should be elevated about one inch, water will circulate, and the standpipe which extends through the roof should be kept full of water and corked up, as much will 20 off in vapor if left open. When you start it place thermometer at each end, and it it is colder at the farther end elevate the tank at the end a little more. The tank should be covered with some sort of cloth—bagging will do. The brooder is intended for 100 chicks, but after they begin to feather the number should be reduced to 50 or 60. It should not cost more than \$5 if a carpenter does the work, but if you do it yourself it should not cost more than \$3. Out of my best hatch of 203 I raised 179 to maturity, receiving 40 cents per pound for broilers and 24 cents per pound for roasters."

"Don't Tobacco Spit or Smoke Your

Life Away." Name of little book just received-tells about Notobac, the wonderful, harmless, economical cure for chewing, smoking, eigaret or snuff habit. You run no physical or financial risk, for Notobac is absolutely guaranteed to cure or money refunded. Your druggist's got it or will get it. Write for the book-mailed free. THE STEBLING REMEDY Co., Box 3, Indiana Mineral Springs, Ind.

the time at 106°. The other times I got 57 and | in which pigeons or a storage room may the time at 106°. The other times I got 57 and in which pigeons or a storage room may 73 per cent. chicks; but some of the eggs were not fertile. I do not test the eggs at all.

"I have not used a brooder of any kind, but I have not used a brooder of any kind, but mansard cupola on the roof affords light



and necessary and always should occupy a separate part of any poultry house. This section is just 15 by 18 feet and 7 feet high, with one window and two doors, one leading into the feeding quarters, the other to the outside. - JOHN W. CAUGHEY.

Watering Before Feeding.

Foreign journals give the following account of valuable experiments recently carried out in Paris, and subsequently in Denmark, by Veterinary Surgeon Marlot, with the object of deciding whether horses should be fed before or after watering. As an animal is nourished not by what it merely eats, but by the food it digests, the first object of the experiments was to establish the effect on the process of digestion produced by the presence of a quantity of water in the stomach while the food was still there.

In the Agricultural School of the French Department of Yonne a horse was fed four liters of oats and immediately watered. Shortly afterward it was killed. About one liter only of the oats was found in its stomach swimming in water, the rest having been washed into the intestines and so lost for purposes of nourishment.

A second horse was first watered and at once fed four liters of oats. After a quarter of an hour it was killed, when the whole of the oats was found in its stomach, and were seen to be already under the influence of the digestive juices. Similar experiments conducted by Veterinary Surgeon Marlot, without killing the animal, showed that a mass of undigested oats was always evacuated if water was given immediately after feeding.

He therefore concludes that horses should always be watered before feeding, and further recommends that they should not be fed at once after work, but first should be allowed to rest a little, then given a little hay, and afterward fed with oats.

Heaven furnished horseshoes to Frank Morris's horse at Worthington, W. Va. Some years ago an ærolite fell near there which contained iron, which was smelted out and made into horseshoes.

THE MARKETS.

Review of the Fortnight.

rated in Belgium which permits the peasants to have some sport. It is a sort of competition in cock crowing.

The game is conducted in this way:
In a garden are placed rows of cages, each containing a cock. Before each cage, about a yard away, stands the marker, who notes the cocoricos of his rooster. The competition lasts for an hour and it is the cock which has Dun's Review for the week ending Sept. markets have exceeded 4,000,000 pounds, amounting to 4,216,325 pounds, against 8,103,-100 last year, and since May 1 the sales have amounted to 53,909,688 pounds against 135,-002,202 last year. But it is encouraging that hour, and it is the cock which has crowed the oftenest that takes the prize. the mills begin to feel the pressure of a re-viving demand for goods, indicating that re-tailers' stocks have been cut down too low for the consumption which yet continues. The At the last competiton a rooster crowed Formerly cock fights were the fashion, stocks of wool at Boston are ample, though it but the organizers of them were so is noticed that western growers are uncom-monly obstinate in holding on to their prodseverely punished that the new amusemonly obstinate in holding on to their product, which is not strange in view of the uncommonly low prices. At Philadelphia there is more inquiry, but very few mills have started as yet. At Chicago the market is improving, and at St. Louis depressed, though trading is more liberal. Here, there is some disposition to have become repeated to compare ment has replaced the old and is quite a Our sketch shows a building that is disposition to buy, because money is compar-atively easy and the price very low, though somewhat different in its arrangement from a great many buildings for poultry few mills nearby are starting.

The Iowa weather crop bulletin estimates keeping. It is practically three separate buildings in one. The first building is

shirtly easy and the price very low, though few mills nearly are saturing.

The Ilowa weather crop bulletin estimates the corn crop of that State at 240,000,000 hosbies, or 15,000,000 hosbies, or 15,000 hosbies

woods, less than 20,000 pounds having been sold during the week.

Australian woods are quiet and unchanged. This quiet demand is caused by the cheapness of domestic wood, and as the foreign market has advanced some, dealers here are talking of sending their woods abroad to be sold. There is more inquiry for carpet woods at steady prices. Quotations follow:

Ohio and Pennsylvania fleeces—No. I fleece, 24:125; X and Y and above, 21a22; XX and XX and above, 23.

Defame wools—Onto, saaz; menigan nne, 22a

Territory Wools—Montana fine and fine medium, 3a16; Montana No. 2 medium, 15a17; Wyoming, Utah, Dakota, Nevada and Colorado fine and fine medium, 3a16; Wyoming, Utah, Dakota, Nevada, and Colorado No. 2 medium, 15a17; Nouthern Clothing Wools—Georgia, 19a20, nominal; Kentucky and Missouri j-blood clothing, 29; Missouri and Indiana, 18a18; Kentucky and Missouri j-blood clothing, 29; Missouri and Indiana, 18a19; Kentucky and Missouri and Indiana, 18a19; Texas Spring medium (12 months), 15a17; Texas Spring fine, 11a14; Texas Spring fine (six to eight months), 12a14; Texas Fali, nominal.

Kansas and Nebraska Wools—Fine, 9a12; medium, 14a16; carpet, 8a12.

Unwashed and Unmerchantable Wools—Ohio and Michigan fine unwashed, 14a17; Ohio and Pennsyivania unmerchantable, 17a18; fat sheep, fine, 14a16; do, medium, 25a22.

Pulled Wools, Scoured Basis—A supers, 35a40; B supers, 35a30; C supers, 22a25; low and No. 1, 15a29; extras and fine A supers, 42a47; fine, combing, 35a38.

California Wools—Spring Northern, 14a16; Middle County Spring, 12a14; Southern defective, 9a11; free Northern Fall, 12a14; Southern, do, 9a19; defective, 8a9.

Oregon Wools—Eastern, fair, 10a13; choice, 14a16; valley, nominal, 17a19.

Australian Wools, Scoured Basis—Combing supers, 62a65; do good, 60a62; do average, 58a60; clothing, 58a60; cro-sbr-d, fine, nominal, 56; do medium, 52; Queensland combing and clothing, 58a60; cro-sbr-d, fine, nominal, 56; do medium, 52; Queensland combing and clothing, 58a60; cro-sbr-d, fine, nominal, 56; do medium, 52; Queensland combing and clothing, 58a60; cro-sbr-d, fine, nominal, 56; do medium, 52; Queensland combing and clothing, 58a60; cro-sbr-d, fine, nominal, 56; do medium, 52; Queensland combing and clothing, 58a60; cro-sbr-d, fine, nominal, 56; do medium, 52; Queensland combing and clothing, 58a60; cro-sbr-d, fine, nominal, 56; do medium, 52; Queensland combing and clothing, 58a60; cro-sbr-d, fine, nominal, 56; do medium, 52; Queensland combing and clothing, 58a60; cro Territory Wools-Montana fine and fine me-

choice.
Cape wools, 25a28, as to quality, nominal.
Carpet Wools—Aleppo, Bija14: Angora 14a14;
Assyrian, 124a13: Cordov., 15ia16; Valparaiso nominal, 16; Donskoi Autumns, 19a29; combings, 24a26; cardings, nominal, 25a22; greasy 18ia14: Bokhara, 18a15); Khorassan fleece 22a 23; East India, nominal; Bagdad, white, 25a26; for choice, and 23a24 for ordinary; do, fawn, 25a 25; do, colored, 25a21 for choice, and 19a20 for ordinary; China carpet, 14a15: do, ball, 18; Karadi, 18a29; Mossoul, 25a2; Sootch, 17a18; camel's hair, 124a134

Cotton.

New York, Sept. 27, 1893.—The cotton market opened steady at a decline of 5 to 7 points, reaced 3 to 5 points, broke again and closed steady at a net decline of 9 to 16 points. The early weakness was due to adverse reports from Europe. According to private cables the let-up in the demand for spot cotton at Liverpool is caused by dispatches from America indicating a pressure of cotton in the Southern markets, forecastag a large movement and reporting more favorable crop prospects. The Government crop report issued this morning was decidedly more favorable than looked for, and more favorable than it has been for several weeks past. By this report it appears that the recent rains in Texas give promise of a top crop in that State in sections that lived through the recent drought. A heavy movement of cotton was predicted at Memphis and Augusta.

Opening. Closing. Last year

September	7.88	7.84a7.85
October	7.88	7.84a7.85
November	7.80	7.94a7.95
December	8.10	8.01a
January	8.21	8.17a8.18
February	8.30	8.26a8.27
March	8.40	8.35a8.36
April	8.49	8.43a8.44
May	8.57	8.51a8.53 Chicago Stock Markets.

Chicago Stock Markets.

Chicago, Sept. 28.—Cattle—Of the 6.000 cattle received yesterday 1,500 were from Texas and 2,500 from the far West. The supply of natives was small and desirable "beef" cattle ruled steady to 10 higher, while undesirable natives and rangers were barely steady. Shippers and exporters bought 1,1:5a1,519-pound intives at 3.20a5.30. Dressed-beefmen paid 3a5.50 for 1,100a. 1,628-pound steers, including common 1,300-pound steers at 4 and choice 1,274-pound steers at 5.25. A car load of Dakota grassers averaging 1,323 pounds sold at 4.75, the highest rangers

LABOMBARDE & DEPAROIS. Commission Dealers-Hay, Grain, and

of the year and the highest since 1891. Westerns sold at 1.60a 3.25 for bulls and cows and 2.40a 4.75 for steers, with the bulk at 2.90a 3.25. Texus sold at 2a 3.70, and native cows largely at 1.75a 2.30. Stock cattle sold at 2.20a 3.40. Quotations are as follows:

2.30. Stock cattle sold at 2.20a3.40. Quotations are as follows:
Fancy native steers, 1,500a1,500 lbs. \$5.50a\$5.70
Choice to fancy steers, 1,200a1,500 lbs. 4.90a 5.45
Good to choice steers, 1,200a1,300 lbs. 3.50a 4.40
Poor to fair steers, 900a1,100 lbs. 2.90a 3.60
Choice to extra cows and helfers. 2.50a 3.60
Fair to good cows and helfers. 1.89a 2.40
Inferior to good canning cows. 1.100a 1.75
Stockers and feeders, 7,00a1,150 lbs. 2.00a 3.20
Native veal calves, 100a400 lbs. 3.00a 6.50
Texas steers, 800a1,200 lbs. 2.10a 2.35
Texas cow, bulls, and stags. 1.50a 2.60
Western rangers, steers. 2.50a 4.50
Western rangers, cows. 2.20a 3.00
Hogs-Receipts about reached expectations but the quality was poores, there being a larger proportion of grassy, heavy, and "sowy" lots among the offerings, while choice heavy were scarcer. The market opened uneven, sales varying in the different divisions from 5 higher to 5 lower. Heavy closed 10 lower, mixed and undesirable light 5 lower, and good bacon

Grain Markets.

		Open.	High.	Low.	Close
Wheat.	December	691	694	687	69
	May	761	764	764	76
Corn		404	404	40	40
	May	448	444	434	44
Oats		284	284	284	28
	(May	324	324	314	32
Pork					14.80
	January	13.65b	13.70	13.65	13.70
Lard	(Ookakan	9.30	9.32	9.25	9.25
	January	7.87	7.95	7.87	7.92
Ribs	October		8.85	8.75	8,95
	January	7.07	7.12	7.07	7.12

Beans and Peas—Marrows are scarce and firm. Medium and pea bean are steady. There is a good demand for red kidneys for export. Green peas are steady. Beans, marrow, choice.... \$2 70 a\$2 75

Dried Fruits and Nuts—There is very little change in dried fruits. Some lots of new evapo-rated apples are coming in, but generally of an-fer or quality. Peaches are a little firmer. Peanuts are easy. aspberries, evaporated, new, per pound aspberries, sun-dried, new, per pound aspberries, sun-dried, new, per pound ackberries, per pound uckleberries, new, per pound pricots, Culifornia, new, per pound lums, Southern, per pound.

Eggs-With moderate receipts and a good demand, prices have advanced. State and Pennsylvania, per dozen, . .. a 23

and the offer of so constructed that a specially of shift or heavy pressure makes no difference, the guards preventing the edge of the blade from cutting or scratching the face, be it either roughly or smooth.

The blade is ma e of the very best material, and can be stropped or honed the same as an ordinary razor. We guarantee if free from all imperfections, and should any be found we will replace with a perfect article. Such full directions are sent with each razor that anyone can shave himself easily, even if he has never used any kind of a razor before.

Apples, Fork, pippin, per large barrel 253a 275
Apples, Fall, pippin, per large barrel 253a 275
Apples, Feall, pippin, per large barrel 200a 250
Apples, Greening, per barrel 200a 250
Apples, Greening, per barrel 100a 1 25
Cranberries, Cape Cod, dark, choice, per barrel 200a 250
Apples, Greening, per barrel 100a 1 25
Cranberries, Cape Cod, dark, choice, per barrel 200a 250
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Apples, Greening, per barrel 100a 1 25
Cranberries, Cape Cod, dark, choice, per barrel 200a 250
Apples, Greening, p 40 a 60 barrel. 4 00
Pears, Seckel, fancy, per barrel. 3 2
Pears, Beurre Bosc, per barrel. 2 20
Pears, Howell, per barrel. 2 5
Pears, ordinary kinds, per barrel. 1 5
Grapes, western New York, Delaware, per basket
Grapes, up-river, Delaware, per pound. Grapes, up-river, Niagara, per pound 2 a 4

Grapes, up-river, Niagara, per pound 2 a 3 q quirces, prime, per pound 2 75 a 3 00

Vegetables—Northern New York potatoes are somewhat firmer. Southern sweet potatoes are steady. New Jersey sweet potatoes are firmer. White onions are firm, and red are steady, white vellow onions are quiet. Cabbage is easier, State celery is in fair demand. Linua beans are searce, and in good demand, and prices are quite firm. Eggplant is easy. Tomatoes and turnips are casy.

Onions, Connecticut, white, per barrel. 2 50a 3 00 Onions, Connecticut, red, per barrel. 1 75a 1 87 Onions, Connecticut, yellow, per 1 75a 2 00 onions, Connecticut, yellow, per barrel 1 75a 2 00 Onions, New Jersey, yellow, per barrel 1 75a 2 00 Onions, Long Island, yellow, per barrel 1 75a 2 00

Furs and Skins-We quote:

The Piedmont Region of the South-"The Best Country Under the Sun."

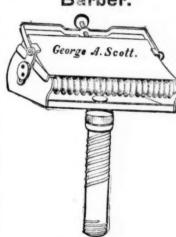
After the war a heavy emigration began to the West from all the Southern States, which continued several years. In late years, however, the movement has been reversed, and people are leaving the West and are settling in all parts of the South. The experience of those who have lived in both sections is that while the yield per acreage is not so large in the South as in some parts of the West, per-haps, yet the net profits for a series of years are quite as satisfactory and life far more comfortable, as the farmer does not have to contend with frequent and protracted drouths, destructive cyclones and caterpillars, and long, dreary, and severely-cold Winters.
Taking into consideration the climate, especially that of the Piedmont region of Virginia, the Carolinas, Georgia, and Alabama, traversed by the Richmond & Danville Rail markets, cheap lands, pure water, and perfect school systems, unquestionably the "Best country under the sun," especially for the tiller of the soil, the manufacturer of cotton, woolen goods, and tobacco, is that situated between Washington, D. C., and Birming-ham, Ala., along the eastern slope of the Blue Ridge Mountains, where all classes of citizens are prosperous and happy and a good livelihood can be had with minimum exertion. Outdoor work can be done every day in the year, and storms, destructive alike to life and property, are not feared as in other sections of the Union.

Map folders, showing time schedule and extent of Richmond & Danville system of

roads, and circulars descriptive of land, climate, etc., can be had on application to the Passenger Department, Richmond & Dan-ville Railroad, Washington, D. C.

THE SAFETY RAZOR.

Every Man His Own Barber.



We supply a long-fel, want in the offer of our Safety Razor, which is so constructed that any man, whether his beard be tough or mild, oan shave himself with ease, comfort, and security. A light or beavy pressure makes no differ-ence, the guards preventing the edge of the blade from cutting or scratching the face, be it either rough or smooth.

Crystal Metal Farm Bells.

A Household Companion to Wife and Children. BUY ONE.

ur bells are covered with rich gold bronze hangings with an indestructible varand the hangings with an indestructible varnish.

Especial attention is called to the fact that our
numbers represent larger bells than do the numbers of any other manufacturer.

A good farm Bell affords you and yours a certain amount of protection you cannot get in
any other way. Farm bells are a necessity, and
no farmer can afford to be without one. They
save time and labor in calling when meals are
ready. They are useful in case of fire or accident to call assistance. They are a protection
to helpless ones left alone in case of unwelcome
visitors.

Price

No. 11 to 19 Hollis St., Nashua, N. H.

| No. 11 to 19 Hollis St., Nashua, N. H. | One of the color of the co

THE FENCE CORNER.

Good Times in Billville.

The times are looking brighter—no matter what they say; And our step is gittin' lighter, and we're happy on the way; . For all the fodder's in the shock—the cotton's in the boll;
And it's glory in the smokehouse, and it's glory provide elaborate systems of drainage

The times are lookin' brighter—that is, the times where the tater's in the fire, and the honey's in
the comb!

And we'll hear the silver jingle, and we'll see And the dollars roll.

And you'll fell 'em in your pocket, and you'll is the task that they should undertake bear 'em in your soul!

The times are lookin' brighter-we feel it in our while we're carvin' of the cornbread, and a selicin' tater-pones!

And no matter what they tell you—you will hear the dollars roll,

And they'll jingle in your pocket, and they'll tingle in your soul!

Allanta Constitution. -Atlanta Constitution.

Must Be Good.

Customer-Is this good soap? Dealer-Well, mum, the man who writes poetry about that soap gets \$10,-000 a year.

Customer-My sakes! Gimme dozen bars .- New York Weekly.

Keeping the Faith.



"Has my boy been a little defender and been kind to dumb animals to-

"Yes, grandma. I let your canary out of the cage, and when my cat caught it, I set Towser on her."

Papa Was Cross.

· Mamma-I wonder what your papa is stamping around about.

Little Boy-I don't know. I didn't go into his room, 'cause he acted cross. Mamma-Maybe he can't find his

it right back where he keeps it, soon as deliberately placed in the roads, the I got through takin' up tacks,-Street & consequences are very dusty roads during Smith's Good News.

The Bible Went No Further. Mother-So you have been fighting,

my son. Johnnie-I had to. Tommie Brown

hit me in the face. Mother—But, my boy, you should have turned the other cheek.

Johnnie-I did, and then he hit that, and, by Hokey, I couldn't stand it no longer, and I licked the stuffin' out of him in about two minutes.

No Need of Help.

York Weekly.



Had a Homelike Sound.

Chicago Bootblack-Se de old hunks wid de eye-glasses? Watch me fetch him. [Raising his voice.] Dazzling brilliancy imperted to pedal covertures for a reasonable pecuniary compensation while you linger! The Old Hunks (from Boston)-Here.

boy !- Chicago Tribune.

Hard to Discriminate.

Tommy-It must be awful unhandy to live among them heathens that don't wear no clothes.

Jimmy-Why? Tommy-Cause. How can anyone tell whether anyone is rich enough to 'scoiate with, when they ain't got no clothes on?

Curiosities of English.

There was a young girl in the choir
Whose voice rose hoir and hoir,
Till it reached such a hight
It was clear out of sight,
And they found it next day in the spoir.
—Detroit Free Press.

In Deep Trouble. Stranger-What's the matter, my litttle man?

Small Boy-I-I took mamma out for a walk, and I've lost her somehow, and I'm 'fraid she can't find herself anywhere. Boo, hoo, hoo!-Street & Smith's Good News.



"I hope you will enjoy this peach pie, dear. I took the greatest pains in

"Well, if you took the pains, perhaps I can eat it and escape them.'

ROAD MAKING.

The Present System of Highway Repairing is Labor Thrown Away.

As a general thing, the country roads on this continent have been so badly located that to build costly pavements upon the present lines and previously would be a dreadful waste of money. As it is ordinarily beyond the means of as soon as possible.

In beginning such a task, the first step is usually practiced in this country, consists in calling out in each road district a gang of men who "work out" their road tax under an overseer elected by the people. The labor done is worse than thrown away, for it is rare indeed for either the overseer or the men under him to have any clear comprehension of what is needed.

Fortunately for the well being of our roads, these men do not work very hard, but rather choose to regard the few days on the road as a kind of holiday outing, a picnic frolic, and a means of getting rid of a certain amount of tax. If they really worked with all their might, they would make the roads almost as impassable in the Summer as they now are in the Winter and early Spring. With some kind of a glimmering idea that ditches on each side of a road are good to have, they plow up these ditches, together with the sod that grows down into them, and pile all of this muck in the middle of the road.

This material, it may be said, has most excellent fertilizing value, and if it were put upon the fields instead of in the who carted it away. But in the roads it is a sad and an immediate hindrance to travel. Luckily the friendly Spring rains usually wash it back into the ditches, where it stays until there is some more tax to be "worked out." When these rains are not sufficient to wash Little Boy-Yes, he can, 'cause I put away these impediments that have been all the dry season.

In some neighborhoods a little more ambitious than those generally to be found they mend the roads by placing gravel and broken stone upon them. macadamizing the roads. Without on two occasions, when the cow was out thoroughly draining the roadbed, to put in a cold wind for several hours. On either broken stone or gravel upon it is each occasion she shrank in milk flow, merely a waste of money and labor, and and also about 0.8 of one per cent. in the ambitious neighborhoods so doing butter fat. prove in the end no wiser than those who Mr. Portlie-Patrick, I wish you so much that where the traffic is not ex- I gave her a less amount than usual for would have this demijohn filled with the tremely heavy and continuous the roads several days she shrank about two or to him: best whisky that Oldd. Stuff & Co. have | will be in tolerable order nine months in | three pounds in milk flow, and from 0.4 in stock. The carriage is out, but when the year and very much better than at to 0.6 of one per cent. butter fat. it returns, I will send it to meet you present, even when the frost is coming aalf-way, as I presume the demijohn will out of the ground at the beginning of New Man—It will be loight enough four or five years without spending one before Oi get that far wid it, sor .- New | penny more than is now spent in the

A Royal Battle.

A small black snake caused a good deal of trouble and quite a loss to John Kreutzer, who owns a 40-acre farm on and yard from Nov. 1 until May 8, ill-luck fellows are great for that), tell the Rock Fork of Brush Creek in the County adjoining Portsmouth, O. The above, had what corn fodder she needed reptile crawled and wrapped itself closely around the hind leg of a fine and valuable Durham bull, which caused the animal to lose its head and go wild. In the same lot pastured with the bull was a high-bred stallion. The bull, after almost exhausting itself in the efforts to throw the snake off, suddenly turned and attacked the stallion. The new tactics of the bull took the horse by surprise, and it was only after his flank had been severely gored that he realized the situation, and then began a battle that would have thrilled the heart of a Spanish bullfighter. The stallion made no atttempt to kick, but struck viciously with his fore feet and tore great quivering chunks of flesh out of the bull with its teeth. The terrific roar of the battle brought Mr. Kreutzer from an adjoining field, but he knew it was death to venture in the yard. At last, after struggling all over the yard, the bull made one grand rush, catching a horn in the horse's groin and disemboweling it. The noble animal sunk to the ground with a groan and expired. The bull staggered away a short distance and fell and was so badly injured that it had to be shot. The snake was alive and still wrapped around the leg, but its career was soon ended.

Taking Foul Air Out of a Well.

I saw, said a writer in the Globe Democrat, a curious method used the other day, in Illinois, to take the foul air out of a well. The well was to be cleaned, but the man that took the job was afraid to go down until he had ascertained the quality of the air at the bottom. He let down a lighted candle, and when it descended to about six feet from the bottom it went out as suddenly

as though extinguished by a whiff of air. That was all he wanted to know. He was sure it had poisonous gas in it, and took a small umbrella, tied a string to the handle and lowered it open into the well. Having let it go nearly to the bottom, he drew it up, carried it a few feet from the well and upset it. He repeated this operation 20 or 30 times, with all the bystanders laughing at him, then again lowered the light, which burned

clear and bright even at the bottom. He then condescended to explain that the gas in the well was carbonic acid gas, the shallow, open pan and bought a tickets read via Cincinnati and the Cincinnati, which is heavier than air, and therefore creamery. After using it a short time Hamilton & Dayton R. R. could be brought up in an umbrella just | we found that the gain in butter fats reas though it were so much water. It covered would soon pay for it with six There is enough iron in the blood of was a simple trick, yet perfectly effective. or eight good cows. It is also much less 48 men to make a 24-pound plowshare.

THE DAIRY.

BUTTER FAT.

Feeding for this Article With Very Poor Results.

EDITOR AMERICAN FARMER: The discussion pro and con over the question of feeding fats into butter seems to hang

on very persistently.

It seems to me that many farmers are very positive in their statements, when, in fact, they are really very uncertain as to what is the actual truth in the matter. Such has been the writer's position. Two years ago he supposed, of course, that fats could be fed into butter. No doubt about it. But the statements made in the leading agricultural and dairy papers put him "at sea." Last Fall I decided to try an experi-

ment on one cow for six months. I wanted a new milch cow and started out to find one. Had a new Babcock milk tester, and "sampled" several cows that were "for sale." Only one cow tested above 3.0 per cent. butter fat. Two of them tested 2.2 per cent.

The cow I selected was of a fair butter type, so far as external points were concerned. Her milk tested 4.2 per cent. of fat. She had dropped her calf about 10 days before; was running in a closely-cropped pasture with a large herd of cattle. It was about the middle of October, and no grain whatever had been given her.

After bringing her home and milking her nearly one week I tested her again. She gave 29 pounds of milk per day, very nearly. Her night's milk tested 4.6 and morning's milk 4.8 per cent. of

I tried different rations in different proportions, but generally gave her for the next three months our regular Winter roads it would amply repay the farmers ration. This consisted of 10 to 14 pounds of clover and timothy hay, five pounds of corn and cobmeal, four pounds of crushed oats, and two pounds of wheat bran. This ration was not so well balanced as it might be, and with the help of Prof. W. A. Henry's feeding tables (found in the Agricultural Department Report on Diseases of Cattle and Cattle Feeding), I afterward improved it somewhat. Tests were made of her milk once or twice every week for the three months following. When given her full and regular ration, milk would test 4.6 and 4.8 per cent. night and morning, respectively. No variation in Then the overseers say that they are this amount of fat was noticeable except

I tried in every way to make her test cover their roads with muck. But it is above the 4.8 per cent. of fat, but with within the means of every neighborhood no success. I gave her all the grain she in the United States to materially im- would eat, added more bran, tried a litprove their roads at once-improve them the oilmeal, but it did no good. When

Leaving her out in a cold wind or storm for a few hours would cause her Spring. And this can be done in three or to shrink in both milk flow and butter fat every time.

This cow now gives from 18 to 20 hurtful methods mentioned.—Harper's pounds of milk per day, and tests from is not a single instance of a dairy farmer. The only sure method is to surround the last two weeks she has shrank 0.2 of one per cent. in butter fat.

She has been milked seven and onehalf months. She was kept in the stable and in addition to the ration given him to go ahead, and leave him with each day.

It seems to me that there is a limit to the amount of butter fat a cow can produce. This cow did not have enough to eat when I bought her, yet she tested 4.2 per cent. of fat.

After securing as well balanced ration as I could, according to my understanding of the matter, and feeding her all she would eat, I could not force her above the 4.8 per cent. mark. So I decided she had reached her limit, and endeavored to keep her there. I have had good success in that line.

We have run the farm for grain alone during several years past, keeping a limited amount of stock. Now, we are slowly changing into Winter dairying. So our dairy experience has been short and sour to a certain extent. Before making any changes we began to read up on dairying, taking several dairy and agricultural papers. As a result, we shall go slow, but sure. We have four cows and one grade Jersey heifer; have bought a thoroughbred, registered Jersey bull calf of a high-test butter pedi-

From experience we find it easier to raise good butter cows than to buy them. It is cheaper also, as only the poorer cows are for sale. It takes considerable hard cash to buy a good butter cow in the few are badly mixed, and are mighty poor scrubs.

We are also using the milk tester, scales, and pencil to guide us aright. plow as to forego these necessary dairy 'implements." We have sold two cows during the past year, simply because they were "eating off their heads," and could not be induced to pay for their board. The milk tester showed that & D. and from one-quarter to one-third of the butter fat was left in the skim milk and went to the pigs, calves, and chickens. These animals may have appreciated this fat, but as it is worth 25 cents a pound to us, and as oilmeal, bran, etc., was worth only about one-twentieth as

work for the mistress of the house. We use the Crystal creamery glass cans, and they are so easy to keep clean and

The milk tester shows from a trace to 0.6 of one per cent butter fat left in the skim milk, according to time of lacta-tion of the cows. Repeated tests of skim milk from the open pan showed from 1.8 to 2.6 per cent of butter fat. Just think of the pure butter fat flowing away from the kitchen and private dairies into the swill tub. Taking the whole country through, it must amount amount to thousands and thousands of pounds.—J. H. Brown, Kalamazoo, County, Mich.

Bad Milk. Tainted milk does not necessarily emit an odor. The more dangerous the taint the less odorous it is. Doubtless this sounds strangely to some, but nevertheless it is a fact. In the warm nights of Summer, milk acquires taints imperceptibly. These are more readily created when a fairly large body of hot, fresh milk as it comes from the cow is poured in a receptacle without æration. Where the animal heat is retained, decomposition sets in very rapidly, and in an hour, or at most two to three hours, the damage is done. Here we have the basis of all the trouble that occurs with cream that suds or holds gas. Everyone who has tried to churn that sort of cream must retain a vivid recollection of the labor they performed in getting butter, and the inferior thing it was when churning was completed. Æration in the first instance would have removed the possibility of taints and the subsequent difficulties that attend its transformation into butter. A large degree of attention to the question of æration would solve many a knotty problem in butter making.—American Dairyman.

Answer to Correspondent.

EDITOR AMERICAN FARMER: Will you Rindly state through the columns of your paper why Swiss cheese and limberger have such a different flavor, and why one is so much harder than the other. — BUTTER MAKER, Boone Co. Ill.

1. Owing to the different kind of bacteria which takes root in the mass and to the amount of salt used.

2. Swiss cheese is heated to a much higher temperature than limberger and some higher than brie. The season has much to do with the temperature to which the curd is raised. Cheese made orchard. He keeps it well cultivated, early in the Spring is made at a temper- and applies bone freely to the soil. He ature about 10 degrees higher than that will take out five suspicious trees this seamade in the late Summer. will take out five suspicious trees this seamade in the late Summer.

Limberger is heated to about 96° brie, 104° or 106°, and Swiss to 120° or more.

Luck or Reason.

Whenever you hear a dairy farmer complaining of ill luck and a lack of profit take off your hat, wherein you have of course pasted the following from John Gould's address to the agricultural students of Ohio University, and read it

"To obtain successful results in the future we must find out whether we are being injured so much by competition as by our own failure to comprehend and push to its limit the productive quality of our daries."

One word more. Tell him that there who has made a progressive succe his work, who has not turned that very searchlight on himself that Gould speaks of. If he still persists in shedding admonition as a duck sheds rain (and these Ben Franklin's adage as a parting shot: Experience is a dear school, but fools will learn in no other." What cowards this idea of "luck" makes of all of us. We outrage a kind Providence and manly human nature, both by giving it a lodgment in our hearts. Reason, reason, not luck, lies back of every event in the universe. To know the reason of things is the true purpose of man's intellect. Luck is the gambler's deity .-Hoard's Dairyman.

Where the Loss is.

The investigations carried on in Wisconsin dairy regions have proven that more than one-half of the cows kept by dairymen do not pay for their feed and care. If this be the case in a State that boasts of such vast dairy interests, doubtless it is also true of all. Other investigations show that an infusion of some of dairy breeds as the Guernsey or Jersey will give immediate improvement.

It cannot be done in a day or a month but nothing but careful and patient work will ever stop the waste now going on in the dairy farm of to-day.

Reserve the Water.

If you depend upon a spring for water for your cows, and the spring is getting low, make a big shallow tank out of twothis section. The Jersey cows around inch planks and set it just below the here are few and far between. Some of spring so as to catch all of the water, then cover spring and all the tank with planks, except a space-wide enough for the cows to drink out of. The philosophy of this is that the tank will fill up at We would as soon run a farm without a night and supply the cows during the day, as no water goes to waste.-Pittsburg Stockman.

Going to the World's Fair?

If you are, go via Cincinnati and the C. H. D. and Monon Routers The superb train service of this line between Cincinnati and Chicago has earned for this line the title of the "World's Fair Route." It is the only line running Pullman Vestibuled trains with dining cars between Cincinnati and Chicago. The C. H. & D. have issued a handsome panoramic view, five feet long, of Chicago and the World's Fair, showing relative heights of the prominent buildings, etc., which will be sent much, and did these animals as much or more good, we decided it was reckless extravagance to feed it. So we dropped the Street, "World's Fair Route," 200 West 4th Street, Cincinnati, O. Be sure your

THE ORCHARD.

EDITOR AMERICAN FARMER: For many years I have thought that the region environing the Capital produced fairly well a greater variety of fruits than any other in our country of which I had personal knowledge, and this, I may say, North and West, has been extensive. There is no fruit that I bear in mind now as being grown in this region of great breadth and extent referred to but that can be grown quite as successfully here. A few years ago the peach that with so many people is regarded as the one almost supassing all others in the excellence of its tastefulness was here grown with great abundance and fine quality. It is not justice to state that the writer grew some of the finest that were brought into the Washington market. In an evil time the "yellows" appeared in the orchards, and nearly all of for the future growing of peaches hereabouts if the orchards to the last one had died. While any of these old orchards are still alive the "yellows" is still here from which to spread into new ones.

However, with the light that many of the old peach growers have now, the time seems opportune for commencing peach growing once more. The law to be made and provided for the situation should constitute an officer whose duty it should be to visit all premises where peach trees are grown and destroy all the affected trees, this duty to be performed annually.

In transplanting new orchards trees of unquestionable character should be ob-

Church, that place being the locality of yellowish and wont cut more than ten or fir his post-office, has demonstrated the possibilities of peaching hereabouts. Some two or three years ago he transplanted a peach orchard of 850 trees. The first year after transplanting he took out 12 trees that were affected with "yellows." ease in the 12 trees to the fact that a neighbor had some old trees that were affected, but which he would not destroy. Last year was not a peach Trooley, year, but he marketed, I think, from 50 to 100 bushels. This season he has a magnificent crop. Hundreds of bushels have already been marketed from the

Tree Protectors.

There is a pressing need for something to prevent injury to the trunks of trees. In the central prairie States in particular rabbits often destroy whole orchards by gnawing off the bark in Winter time. In Texas the same thing occurs in Midsummer, as rabbits are unusually numerous there. In the extreme Northern States the severity of the Winter often causes the trunks to become diseased. and in some cases die. The very hot sun in Midsummer also seriously affects the south side of trees, making large blemishes, which often prove fatal.

It is useless to depend on washes of any kind to prevent under all circumstances the depredations of rabbits. bodies of the trees with some material which they will not gnaw. Cornstalks and tall grass tied fast with strings, hay ropes, rags, and paper wound about them are commonly used and are cheap, but perishable, and have to be annually renewed. A piece of closely woven wire netting, about 12 x 18 inches, bent about the trees and fastened by a wire, makes a surer protection, and costs about three cents. It will also stop the eating of the bark by mice and prevent the beetle of the round-headed borer from laying eggs, and will last for several years. A bunch of soft grass stuck in the top will keep it in proper position and allow no chaffing of the tree.

Another cheap and durable protection is made from wire and plain laths or strips. It has been used in a small way for many years, but only within the last four years has it been prominently before the public. Cypress or cedar laths are best where easily procured, but those of pine will last very well. Cut in two pieces, this being about the right length, but longer pieces can be used if desired and deemed necessary for the better protection of tall trunks. Six laths make a protection large enough for a small tree, but seven or eight are more commonly needed to prevent renewal until the trees have attained an independent age. These laths are fastened together with three wire strips, one at each end and another in the middle, and the whole placed around the tree and the ends of the wires united.

Tree Lucerne.

Some 12 years ago tagasaste, or tree lucerne, was introduced into South Australia by the late Dr. Schomburgh, and since that time has been raised quite extensively in some parts of that country. This plant originated in the Canary Islands, and is used there for feeding all kinds of cattle. The great merit of this

0000000000 A Wonderworking quarter is the 25 cents invested in a box of Beecham's (a Guinea) Pills

—a medicine that in numberless cases, will give relief promptly. 00000000000

PATENTS

and patentability of inventions and validity of patents. Rejected applications prese-outed. All business relating to patents

promptly attended to tree lies in its resistance of drouth. It may be grown on almost any kind of land, but makes its largest growth on sandy soil. In a warm climate tree lucerne grows to the hight of 20 feet, but may be kept dwarf either by frequent cutting or by pasturing. This plant grows and thrives in soils where almost any other forage plant would die, and in southern Australia much of the land which now lies idle could be made to support as many cattle as the more fertile land of other parts of the country by planting in tagasaste. The seed are sown at any time, but the young trees are transplanted during the Winter months. During the first few years of the plant's them died. It would have been better growth they must be cultivated, after which they are able to take care of themselves.

A Queer Letter.

The employes of the Post-office Department at Washington who have occasion to use the files of the office often find queer documents. One of the most amusing is a report from a man who was Postmaster of Waterford, Fulton Co., Ill., during the Buchanan Administration. It is as follows:

watterford fulton co ils, July the 9 1857. muster james buckannin, president of United States Dear Sur Bean required by the instructions of the post-office to report quart-erly, I now foolfil that pleasin duty by reportin as follows. The Harvestin has been going on pretty well and most of the nabors Mr. D. O. Munson, living near Falls hardly a average crop on rollin lans corn is have got thur cuttin abought dun, wheat is teen booshils to the aker the health of the communitie is only Tolerably meesils and colery have broke out in about 2 and a half miles from hear, thair are a powerful awaken on the subjec of religun in the potts naborhood and meny souls are being m their sins forgiven miss nancy Smith a neer nabor had twins day before yisterdy one of He attributes the appearance of the dispoar scraggy thing, and wont live half its days this is abought awl i know and have to report the present quarter giv my respects to Mrs. Buckanin and subscrib miself yours Abigal jenkins p m at fulton Co ills.

STRAWS.

Amber is supposed to be the resin o an extinct species of pine tree.

One thousand feet of dried white pine lumber weighs about 2,500 pounds. Wheat is now being shipped from

Duluth to Buffalo, a distance of 1,000 miles, by the great lake steamers for one cent a bushel. Of the 2,300,000,000 bushels of oats annually produced, 600,000,000 bushels are credited to America and 167,000,

000 to the United Kingdom. The Tekoa Globe reports a field of rye in that section of Washington which will average nine feet in hight, while many of the heads measure 10 inches in length.

found in eastern California and western Arizona, cannot be touched without it exhibits signs of vexation by ruffling its leaves and giving forth an unpleasant, sickening odor. Cuba took in the fiscal

closed 1.041,474 bushels of corn, against 627.177 in the fiscal year preceding. Brazil took 19,488,281 yards of cotton cloth from us in the fiscal year 1893, against 10,324,021 in 1892. The United States stands first among

all nations in the annual product of hay, Germany is second Russia third France fourth, and Austria fifth. These five countries furnish about five-sixths of the entire hav crop of the world.

The thrifty peasants of Poltava, Russia, have shown themselves smart enough to take advantage even of a pest. Recently their fields were invaded by swarms of Spanish flies, which they captured and found a ready market for at the druggist's at \$1 a pound.

Six hundred tons, or nearly 1,500, 000 pounds, of fruit are shipped East daily from Sacramento, Cal. Six of the huge 12-wheel engines are constantly employed in taking the toothsome cargoes up the slopes of the Sierra Nevada and starting them on their way to the Eastern market.

If celery were eaten freely, sufferers from rheumatism would be comparatively few. It is a mistaken iden that cold and damp produces the disease—they simply develop it. Acid blood is the primary and sustaining cause. If celery is eaten largely, an alkaline blood is the result, and where this exists there can be neither rheumatism nor gout. It should be eaten cooked.

The common people of Russia, as a rule, speak only their own tongue. A large proportion of them cannot read the bewildering characters-Roman, Greek, and composite-which form their alphabet, and to help their ignorance the shop walls are covered over with rudely painted pictures of articles for sale within. The butcher's shop has a picture of meats of all sorts and shapes, the tailor's walls are covered with paintings of coats and trousers. The pills of the apothecary and the vegetables of the green grocer are advertised by pictures upon the doors and windows of their stores.

The Chinese in California have a chance to go to a warmer climate. They are offered \$25 a head in British Guiana to hoe sugar cane and dig for gold. The colony only wants 5,000 of them in the meantime, but if they behave themselves and do not make their queues stand out at right angles with pride there may be a demand for more. European cannot toil with his hands in Guiana, and John would have a monoply of the labor market. Here he is at a disadvantage, because the white man is able to undertake a great deal more work than there is in sight.

GEORGE E. LEMON.

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